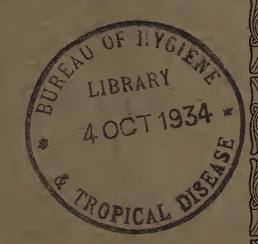
COUNTY BOROUGH OF ST. HELENS





Annual Report

OF THE

Medical Officer of Health, FOR THE YEAR 1933.

FRANK HAUXWELL, M.B., Ch.B., D.P.H.

Medical Officer of Health,

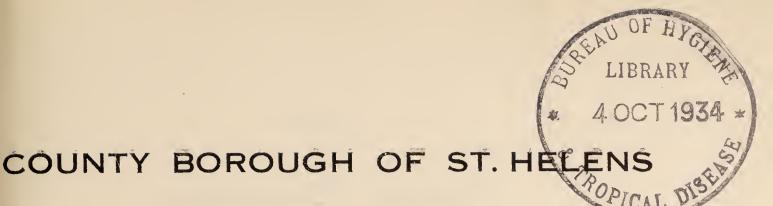
and School Medical Officer.

St. Helens:

Wood, Westworth & Co., Limited, Printers and Stationers,
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1934.

Health Committee.

Chairman:

ALDERMAN T. HAMBLETT, J.P.

Deputy-Chairman:

COUNCILLOR EVELYN PILKINGTON, C.B.E., J.P.

THE RIGHT WORSHIPFUL THE MAYOR, (Councillor James Thackray, J.P.)

ALDERMAN F. McCormack.

H. H. Peet, J.P.

Councillor N. Birch, J.P.

", W. Burrows, J.P.

" A. Dodd.

,, R. Ellison, J.P.

,, ELLEN McCormack.

" M. McFarlane, J.P.

,, R. Rennie.

" T. Woods.

Maternity and Child Welfare Committee

Chairman:

ALDERMAN T. HAMBLETT, J.P.

Deputy Chairman:

Councillor Evelyn Pilkington, C.B.E., J.P.

The Health Committee
together with the following co-opted members:
Mrs. H. B. Bates, and
Mrs. B. McGhie.

INDEX.

								F	PAGE
GE	NERAL STATISTICS	S					•••••		6
STA	AFF		•••••	••••	••••	•••••	•••••		7
NA	tural and Socia	L Coni	DITIONS	OF TH	e Area				9
VI	TAL STATISTICS				•• ••••	•••••		*****	11
Ini	FECTIOUS DISEASES	S		•••••	•••••	•••••	•••••		24
La	BORATORY WORK				•••••				41
Tu	BERCULOSIS							•••••	41
VEI	NEREAL DISEASES						•••••	•••••	52
Sui	mmary of Nursi	ng Arr	ANGEM.	ents, F	Hospita	LS, ANI	O OTHEI	₹	
	Institutio	NS AVA	ILABLE	FOR TH	E DISTR	ICT			55
M_A	TERNITY AND CH	ILD WE	ELFARE						60
Or	THOPAEDICS						•••••		85
WE	LEFARE OF THE BL	IND					•••••	•••••	91
Lo	cal Governmen	г Аст,	1929					••••	92
Lis	T OF ADOPTIVE A	nd Loc	CAL ACT	rs, Bye	LAWS A	nd Loc	CAL REG	GULA	A -
	TIONS AND	Orders	S RELAT	ING TO	PUBLIC	C HEAL	TH, IN		
	FORCE IN T	HE DIST	RICT			•••••	•••••		94
Ins	SPECTION AND SUI	PERVISIO	on of I	GOOD					97
SAI	NITARY CIRCUMST	'ANCES (OF THE	Area		•••••		••••	118
Но	USING								132
HE	alth Education				· · · · ·				140
Ap	PENDIX. HOUSIN	ig Act.	1930						142

TO THE MAYOR, ALDERMEN AND COUNCILLORS OF THE COUNTY BOROUGH OF ST. HELENS.

Mr. Mayor, Ladies and Gentlemen,

I have the honour to submit the 61st Annual Report on the health of St. Helens for the year ended the 31st December, 1933.

The year 1933 was not a healthy year in St. Helens. Severe epidemics of influenza, whooping cough, and measles, together with increased prevalence of diphtheria and the somewhat unusual outbreaks of enteric fever and cerebro spinal meningitis (regarding) all of which detailed report is made in the Infectious Diseases Section), are all reflected in increases in mortality rates. The death rate for 1933 of 14.0 per 1,000 of the population is, with the exception of the year 1929, the highest since 1919, and the infant mortality is the highest since 1919, though very nearly approached in the years: 1922 and 1929. What effect poverty due to industrial depression has had on the incidence of epidemics and on the mortality rates it: is difficult to say. Although the presence of epidemics such as occurred in St. Helens during 1933 is not necessarily dependant on a lowering of general health, observations of cases admitted to hospitals or attending the various clinics suggest there has been some slight falling off. The position will, therefore, have to be watched carefully.

Two of the most important occurrences during the year affecting the health services were the passing of the St. Helens Corporation Act, 1933 and the commencement of work on Slum Clearance Schemes. The new Act contains many new sanitary clauses which strengthen considerably the Corporation's powers in relation to health matters. The commencement of work on Slum Clearance Schemes marks the commencement of a programme (printed as an Appendix) by means of which it is hoped to do away with all slums in St. Helens by 1938.

For details regarding the various activities of the health department I would refer to the several sections of the Report, but special attention might be drawn to the following:—

- 1.—The need of new clinic and office premises. This is one of the most urgent needs of the health services. The premises at present are such that they not only interfere with effective administration, but clinical and educational work is seriously handicapped through overcrowding and lack of suitable accommodation. I would again suggest the building of an entirely new health department with accommodation for all clinics on the ground floor and administrative offices above. Such a building could then become a well organised health centre for the town.
- 2.—The need for a care and after-care committee to help the tuberculous patient—page 47.
- 3.—The desirability of extending the orthopaedic scheme to cover cases of bone and joint tuberculosis after the age of 16 years—page 48.
- 4.—The desirability of improvements and alterations at the Public Abattoir—page 97.
- 5.—The desirability of improvement in the sewerage system—page 119.
 - 6.—The need for special toddlers' clinics—page 75.

I take this opportunity of thanking members of the Council for the kindness and consideration shown to me in the conduct of my work, and I have to record my hearty appreciation of the loyal and willing co-operation of all members of my Staff.

I have the honour to be,

Your obedient Servant,

FRANK HAUXWELL.

August, 1934.

GENERAL STATISTICS.

	Area (Acres)					7,284
	Population (Census, 1931)					106,789
	Estimated Population mid-year	1933				107,6000
*	Number of structurally separate	dwell	ings			
	occupied and vacant					21,565
*	Number of families or separate	occup	iers			22,960
	Number of inhabited houses (en	nd of 1	.933) ac	cording	3	
	to Rate Books					23,074
	Rateable Value			,.		£414,414
	Product of a penny rate					£1,597
	* From C	ensus,	1931.			

The Net Cost on the Rates of the various Health Services in St. Helens during the year ended the 31st March, 1934, as compared with the previous year is given below.

				Pence 1	per f
				1932-33.	1933-34
Isolation Hospital	•••••	•••••	*****	3.718	3.876
Tuberculosis				. 6.926	6.986
Maternity and Child Welfare		•••••	••••	8.722	8.872
Venereal Diseases		•••••	•••••	.435	.408
Blind Persons		•••••	•••••	2.952	3.015
Food and Drugs Acts	•••••			.218	.228
Slaughterhouse and Cold Sto	res		*****	.269	.237
Contagious Diseases of Anim	als			.047	.029
General Sanitary and Admini	istrativ	e Cha	rges	5.950	6.451
Sewage Disposal	•••••	•••••	•••••	3.122	3.434
*Collection and Disposal of F	Refuse		•••••	15.958	16.109
Public Conveniences		*****		.487	.519
Total Net Cost of He	ealth	Servi	ces	48.804	50.164

^{*}This service is under the control of the Cleansing and Transport Committee

STAFF.

Medical Officer of Health, Administrative Tuberculosis Officer, Medical Superintendent of Corporation Hospitals, and School Medical Officer:

Frank Hauxwell, M.B., Ch.B. (Glasgow), D.P.H. (Camb.)

Deputy Medical Officer of Health:

S. F. Allison, M.B., Ch.B. (Edinburgh), D.P.H. (Camb.).

Assistant Medical Officers of Health:

J. S. G. Burnett, M.B., Ch.B., D.P.H. (Glasgow).

G. O'Brien, M.B., Ch.B., D.P.H. (St. Andrews).

Enid M. Hughes, M.B., Ch.B. (Liverpool).

Dental Surgeons:

A. G. Batten, L.D.S.

L. A. Jones, L.D.S.

Annie M. Kean, L.D.S.

Sanitary Inspectors, etc.:

Ernest Sefton, (1), (5), (10), (11), Chief Sanitary Inspector.

- L. Butterworth, (1), (5), Deputy Chief Sanitary Inspector (resigned 27/5/1933).
- F. Potter, (5), (12), Deputy Chief Sanitary Inspector (from 10/7/1933).
- H. Brown, (1), (4), (5), (6).......Sanitary Inspector.
- H. A. Perry, (4), (5), (12)......do.
- W. A. Young, (4), (5), (12) do. (from 1/9/1933).
- H. F. Rickett Assistant Sanitary Inspector.
- T. Blashill, (1), (5) Superintendent of Public Abattoir.

Matrons of Corporation Hospitals:

Edith Carder, Borough Isolation Hospital and Eccleston Hall Sanatorium.

Eva May Peters, St. Helens Maternity and Child Welfare Hospital.

Health Visitors and School Nurses:

Ethel Denman, (1), (2), (3), (7)	Mary Corrish,	(3), (7)
Mary Riding,	(3), (7)	Alice Happold,	(3), (7)
Winifred Cowan,	(2), (3), (7)	*Mary Elliott,	(3), (7)
Amy Coates,	(2), (3), (7)	Edith Curran,	(3), (7)
Emily Corrish,	(2), (3), (7)	Ellen R. McDonald,	(2), (3), (7)
Daisy C. Cruickshank,	(3), (7)	Agnes MacDonald,	(2), (3), (7)
Nora Hogan,	(3), (7)	Doris Parkinson,	(2), (3), (7)

Orthopaedic Nurse:

Constance Anthony (9) (resigned 15/3/1933). Isabelle Marvin Corke (9) (from 23/5/1933).

Tuberculosis Nurse:

Grace Sumner

(7)

Clerk Dispenser and Venereal Diseases Attendant:

Jas. McP. Hutton.

Venereal Diseases Nurse:

Florence Wilkinson

(7)

- Sanitary Inspector's Certificate of the Royal Sanitary Institute. Health Visitor's Certificate of the Royal Sanitary Institute. Certificate of the Central Midwives Board. Sanitary Inspector's Certificate of the Liverpool University. Certificate for Meat Inspection of the Royal Sanitary Institute. Certificate for Meat Inspection of Liverpool University.
- A trained Nurse.
- Certificate for Sanitary Science of the Royal Sanitary Institute. Certificate of Chartered Society of Masseuses, etc.
- Diploma of the Institute of Sanitary Engineers.
 Diploma of the Building Surveyors' Association.
 Sanitary Inspector's Certificate of the Royal Sanitary Institute and Sanitary Inspectors' Examination Joint Board.
 Smoke Inspector's Certificate of the Royal Sanitary Institute.

^{*}Died October, 1933.

The following are part-time officers:—

District Medical Officers and Public Vaccinators:—H. B. Bates, L.S.A., L.M.S.S.A.; J. S. Fox, M.B., C.M., M.R.C.S.; P. J. O'Keeffe, L.R.C.P., L.R.C.S., L.R.F.P.S., I.M.

Vaccination Officer: -Alfred Griffin.

Physician to the X-ray Department, Tuberculosis Dispensary: J. Unsworth, M.B., B.S., (Lond.).

Orthopaedic Surgeon:—B. L. McFarland, M.D. (Liverp.), M.Ch. (Orth.), M.B., Ch.B., F.R.C.S. (Edin.).

Ophthalmic Surgeon :- E. Allan, M.B., Ch.B. (Edin.).

Obstetrician and Gynaecologist:—J. W. Burns, M.D. (Dublin), B.A., M.B., B.Ch., B.A.O., F.R.C.S. (Edin.)

Public Analyst: - Herbert J. Evans, B.Sc., F.I.C., F.C.S.

Veterinary Inspector: —T. J. Kenny, M.R.C.V.S.

1.—NATURAL AND SOCIAL CONDITIONS OF THE AREA.

PHYSICAL FEATURES AND GENERAL CHARAC-TER.—St. Helens is situated 10 miles east of Liverpool and 20 miles west of Manchester, and lies on the southern fringe of the Lancashire coal fields. The area of the borough is 7,284 acres of which approximately one-quarter only is occupied by factories and other industrial works. As a whole the borough is remarkable for the large number and extent of open spaces, and is well supplied with public

parks and recreation grounds,

Geologically the soil consists of clay overlying coal measures, and owing to past mining activities some portions of the town are peculiarly susceptible to subsidence. This is particularly so in the Sutton and Derbyshire Hill districts.

SOCIAL CONDITIONS.—The chief industries of the town are coal mining and glass making.

The average number of persons unemployed in St. Helens and registered at the Labour Exchange during 1933 (as shown by the figures taken on Monday of each week) was 9,007 men, 555 women, and 470 juveniles (total 10,032). The largest number of unemployed was 11,875 in June. The total for 1933 shows a slight decrease from the previous year when the average total number of unemployed persons was 10,707.

The total amount of domiciliary relief granted in St. Helens by the Public Assistance Committee during the year ended 31st March, 1934, was £75,890/16/10d., of which sum £25,213/11/3d. was granted to unemployed men and their families.

From St. Helens 375 men, 228 women and 133 children were admitted to the Poor Law Infirmary, and 167 men, 57 women and 27 children were admitted to the "House" during the year.

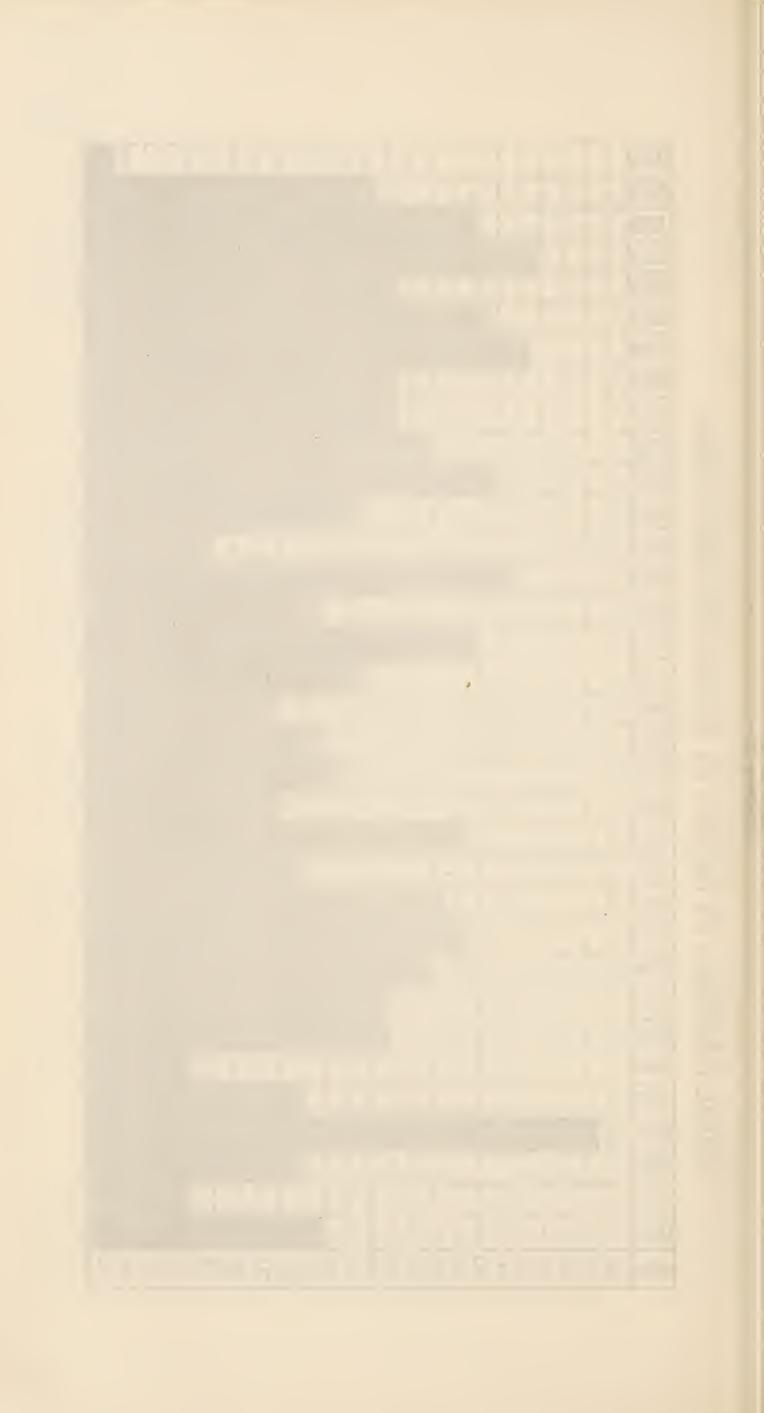
Under the National Health Insurance Act, the total number of insured persons in St. Helens on 1st October, 1933, was 44,033 comprising 34,153 men and 9,880 women, or approximately 41% of the total population.

METEOROLOGY.—The total rainfall for the year, as measured at the Victoria Park Observatory, was 23.58 inches, being the smallest amount recorded at that observatory in any year since it was opened in 1891. The amount of rainfall recorded at Eccleston Hill Waterworks during the year (22.2 inches) is also the lowest

Table /.

TOTAL RAINFALL IN INCHES IN ST.HELENS SINCE 1900.

2261						T			Г	Г		Т									7	T	T		I
1932		-				-		-	-																ı
		-				-	-																		١
1261		-	1	-																					ı
6261		-	-	_																					ı
8261					-																				ı
1561						-																			l
9261				-																					ı
1925		-								-															۱
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5261			-																						ı
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recorded there since measurements were first taken in 1871, with the exception of the rainfall of 21.10 inches during the year 1887. The annual rainfall at Victoria Park since 1900 is shown in Table 1.

The highest temperature in the shade during the year was on the 28th July, when it reached 84.6°F, and the lowest was 21.0°F on the 7th December.

The prevailing wind during the year was N.W.

The special gauge maintained in the centre of the town for the collection and measurement of the amount of atmospheric pollution showed the total solids deposited in St. Helens from the atmosphere during the year ending the 31st March, 1934 to be 12,356 metric tons per 100 square kilometres or approximately 1,122 pounds per acre.

II.—VITAL STATISTICS.

EXTRACTS FROM VITAL STATISTICS OF THE YEAR:

				M.	F.	Total.
Births:—Legitimate				997	898	1,895
Illegitimate		*****	•••••	23	21	44
		Totals	. .	1,020	919	1,939
Birth Rate per 1,00	0 of	the estin	nated	resident po	pulation	18.0

Still Births:—M. 74, F. 47; Total: 121.

Deaths:—M. 823, F. 680; Total: 1,503.

Death Rate per 1,000 of the estimated resident population......14.0

Percentage of total deaths occurring in public institutions.......34%

Number of women dying from diseases and accidents of pregnancy and child birth:—

Rate per 1,000 total

		2 444	(live and		
	Deat	ths	birth	•	
From puerperal sepsis	1		0.4	9	
From other puerperal causes	10		4.8	5	
Total	11		5.3	4	
Deaths of infants under one year of	age:-	_			
	0	M.	F.	Т	otal.
Legitimate	•••••	137	80		217
Illegitimate		6	1		7
Total		143	81		224
			and the second s		
Death Rate of Infants under one ye	ar of a	ge :—			
All infants per 1,000 live birt	:hs			13	15.5
Legitimate infants per 1,000	legitin	nate liv	e births	13	14.5
Illegitimate infants per 1,000	illegit	imate l	ive births	15	59.1
Deaths from Measles (all ages)	*****				12
,, Whooping Cough (all	ages)		•••••		52
,, Diarrhœa (under 2 yea	ars of a	age)			12
" Tuberculosis	•••••				90
Zymotic Death Rate		•••••		(0.83

Table 2 shows the main vital statistics of St. Helens in comparison with those of the other County Boroughs in Lancashire as well as with those for England and Wales and the 118 County Boroughs and Great Towns in England and Wales.

Table 2.

	Estimated	Birth Rate	Crude Death Rate	Infant Mortality	Maternal Mortality	Tuber- culosis Death Rate (all forms)
COUNTY BOROUGH	civil population	per 1,000	population	per 1,000 live births	per 1,000 total (live and still) births	per 100,000 population
England and Wales	40,350,000	14.4	12.3	64	4.3	82
and Great Towns	20,562,454	14.4	12.2	67	>pt	*
Barrow-in-Furness Blackburn Blackpool Bolton Bootle Burnley Bury Liverpool Manchester Oldham Preston Rochdale	121,400 104,100 177,000 77,210 95,900 59,200 866,013 771,165 136,700 117,800	13.5 12.0 10.0 11.9 21.4 12.2 12.6 19.5 14.4 12.4 14.6 11.4	12.1 14.4 14.8 14.1 13.9 14.9 14.0 14.4 13.4 14.9 13.4 15.0	64 71 67 79 88 75 53 98 75 70 87 89	8.9 3.9 2.9 7.9 3.5 6.5 6.3 3.4 4.9 7.6 4.1 2.7	86 79 73 65 150 88 66 134 115 80 84
ST. HELENS	107,600	18.0	14.0	116	5.3	84
Salford Southport Warrington Wigan	78,980 81,080 85,150	15.3 9.7 16.0 16.6	13.9 12.8 12.4 14.3	80 57 70 109	6.7 3.8 4.3 7.1	132 62 99 94

^{*}Rates not available.

From this table it will be seen that of the 17 County Boroughs in Lancashire, St. Helens has the third highest birth rate, the eighth lowest death rate, and is eighth lowest in the tuberculosis death rate and eighth highest in the rate of maternal mortality. It has, however, the highest rate of infant mortality.

Table 3 gives a summary of the vital statistics for the past 50 years.

POPULATION.—According to the Registrar General's Estimate, the population of St. Helens on the 30th June, 1933 was 107,600, being the same figure as for the previous year and 811 more than the population as revealed by the Census in 1931.

The natural increase in population during 1933, i.e., the excess of the number of births over deaths, was 436, as compared with a natural increase of 933 in 1932 and 824 in 1931.

Table 3. Statistics for St. Helens since 1884.

		a state of a land to	15tati	otres ro	. De. 1	lelens sin	ilee i	884.		X II IV				
	E	ø.	te	e	late	sons			D	EATH	IS FR	OM		
YEAR	Population	Birth Rate	Death Rate	Zymotic Death Rate	Infant Mortality Rate	Rate of Persons Married	Small Pox	Measles	Scarlet Fever	Typhoid Fever	Typhus Fever	Diarrhoea	Whooping Cough	Diphtheria
1884 1885 1886 1887 1888 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915† 1916† 1917† 1918† 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933	61,584 62,932 64,311 65,718 67,158 68,628 70,132 71,509 72,399 73,576 *76,112 77,288 78,482 79,694 80,926 82,176 83,445 84,734 86,043 87,372 88,722 89,843 91,153 92,476 93,812 95,161 96,523 96,870 98,159 99,460 100,775 92,240 90,000 90,600 100,805 104,822 104,900 106,400 107,100 106,400 107,100 108,700 109,600 110,000 110,000 110,000 110,000 110,000 110,000 110,000 110,000 110,000 107,600 107,600	42.50 39.93 40.70 37.00 39.20 39.86 38.90 40.80 40.2 41.3 37.8 40.9 38.7 40.0 40.3 38.3 37.1 36.9 37.4 36.1 37.4 36.1 37.4 36.1 37.4 36.1 37.5 32.0 32.7 33.5 32.0 32.7 33.5 32.1 26.5 22.0 24.1 25.5 31.8 29.1 26.4 24.4 24.1 23.9 23.2 20.8 21.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5	24.16 23.32 22.46 21.69 19.80 23.50 25.43 26.02 21.0 24.4 18.3 21.8 20.9 21.8 19.7 17.5 20.9 17.2 17.3 18.3 16.5 14.5 18.3 15.5 18.3 15.5 12.6 13.6 13.6 14.6 11.4 12.0 14.4 14.0	5.3 3.5 5.2 3.9 3.1 4.18 5.3 2.64 5.4 2.21 3.73 4.3 2.2.56 2.56 2.60 1.72 3.96 1.88 1.79 2.87 1.32 3.5 1.26 3.74 1.62 3.73 1.63 1.63 1.63 1.63 1.63 1.63 1.63 1.6	173 168 172 163 151 177 170 180 147 196 161 181 177 181 177 188 175 167 138 174 132 155 122 149 121 158 124 155 138 129 108 117 113 100 102 88 89 116		000000000000000000000000000000000000000	131 81 102 53 38 78 19 54 23 135 21 54 38 87 17 21 59 7 59 131 41 10 145 62 189 25 126 65 26 56 7 60 127 60 127 60 60 127 60 60 60 60 60 60 60 60 60 60 60 60 60	16 13 34 35 11 3 181 24 8 6 14 9 9 44 24 8 25 29 52 6 17 16 4 10 29 33 22 13 19 26 5 12 30 22 4 9 7 5 4 4 1 7 1 2 5 6 2 0 1 2	33 7 28 34 22 81 24 26 25 52 26 59 40 33 30 43 19 34 25 18 12 12 13 10 22 8 4 4 6 6 6 6 6 7 8 10 10 10 10 10 10 10 10 10 10 10 10 10	2 1 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0	131 56 122 101 65 85 74 78 84 168 38 101 63 133 140 114 95 50 53 120 66 105 36 59 78 44 63 78 44 64 35 44 64 35 46 46 46 46 46 46 46 46 46 46 46 46 46	9 53 41 28 61 15 68 29 31 9 61 478 33 44 15 61 7 18 30 49 26 5 52 7 62 16 39 46 18 24 40 34 19 24 7 7 24 3 10 11 33 4 5 21 13 8 0 4 52	11 10 11 29 13 9 12 16 10 8 17 20 16 15 19 3 20 22 18 22 11 17 12 7 8 19 15 8 2 8 5 79 10 25 13 5 5 8 4 6 6 7 10 11 4 7 0 8

† Estimated civil population. * Borough extended.

BIRTHS.—The number of births registered in St. Helens during 1933 was 1,998. 21 births occurring in other districts were transferable to St. Helens and 80 occurring in the borough were transferred to other districts, making a total of 1,939 births belonging to the borough. The birth rate for the year was 18.0 per 1,000 of the population as compared with 20.1 for the previous year. The rate both for England and Wales and for the 118 County Boroughs and Great Towns during 1933 was 14.4.

The following table shows the birth rate and the marriage rate for St. Helens for 1933 in comparison with the rates for quinquennial periods since 1896.

	Perio	od.			Birth Rate.	Marriage Rate.
1896-1900			*****	*/***	37.0	13.5
1901-1905					33.5	12.7
1906-1910			••••	•••••	37.3	13.5
1911-1915					32 5	14.3
1916-1920	*****	*****	******		25 9	14.2
1921-1925	*****	*****	*****	*****	25.5	13.2
1926-1930	•••••	•••••	*****		21.6	12.0
,,_0 .,,,	•••••	•••••	*****	•••••		12.0
1930	•••••	******	•••••	*****	21.5	13.6
1931		*****	•••••	*****	20.1	13.6
1932	*****	*****	•••••	******	20.1	13.9
1933	*****		*****	*****	18.0	13.4

In 1933 the male births numbered 1,020 and the female 919, being a proportion of 1,109 male to 1,000 female children born.

Illegitimate births were 2.3% of the total, as compared with 2.0% in the previous year. Table 4 gives the illegitimate birth rate since 1914.

Table 6 shows the number of births notified for each ward during the year, and Table 7 shows the birth rate for St. Helens since 1880 and the figures for England and Wales for the same period. The births and deaths in the local hospitals are allocated to the wards in which the usual places of residence are situated.

Table 4.

Number of illegitimate births.

4	
4	0.6
4	0.41 0.41
59	0.54
72	99.0
58	0.53
62	0.7 0.64 0.72 0.61 0.7 0.56 0.53 0.66 0.54
80	0.7
89	0.61
79	0.72
70	0.64
9/	0.7
8	0.7
136	1.3
131	1.2
127	0.96 0.90 0.79 0.79 1.1 1.2 1.2
112	
	0.79
78	0.79
92	0.90
76	0.96
SU	000 :
e birtl	per 1,
er of timat	tion
Numbe illegi	Proportion per 1,000 population
	81 76 70 79 68 80 62 58 72 59

Table 5.

Number of marriages.

1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 ser of Marriages 706 745 568 536 579 924 882 903 612 686 692 661 565 653 653 710 740 738 750 ser of Marriages 14.01 14.5 11.58 10.60 11.4 17.5 16.8 17.2 11.5 12.8 12.7 12.0 10.2 11.5 11.8 13.0 13.6 13.6 13.6 13.6	1933	723	13.4
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	1932	750	13.9
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	1631	738	13.6
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	1930	740	13.6
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	1929	710	13.0
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	1928	653	11.8
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	1927	653	11.5
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	9761	595	10.2
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	1925	199	12.0
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	1924	692	12.7
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	1923	989	12.8
1914 1915 1916 1917 1918 1919 1920 706 745 568 536 579 924 882 14.01 14.5 11.58 10.60 11.4 17.5 16.8	1922	612	11.5
	1921	903	
	1920	882	16.8
	1919	924	17.5
	1918	579	4.
	1917	536	10.60
	9161	568	11.58
	1915	745	14.5
	1914	902	14.01
fears Vumber of Marrie Aarriage rate per 1 population		səğı	
fears Vumber of Aarriage rat population	:	Marrie	te per I
Vum Vum Pop		oer of	age rat
7 4 2	Years	Num	Marri

TABLE 7. BIRTH RATE ST. HELENS and ENGLAND and WALES, 1880 - 1933

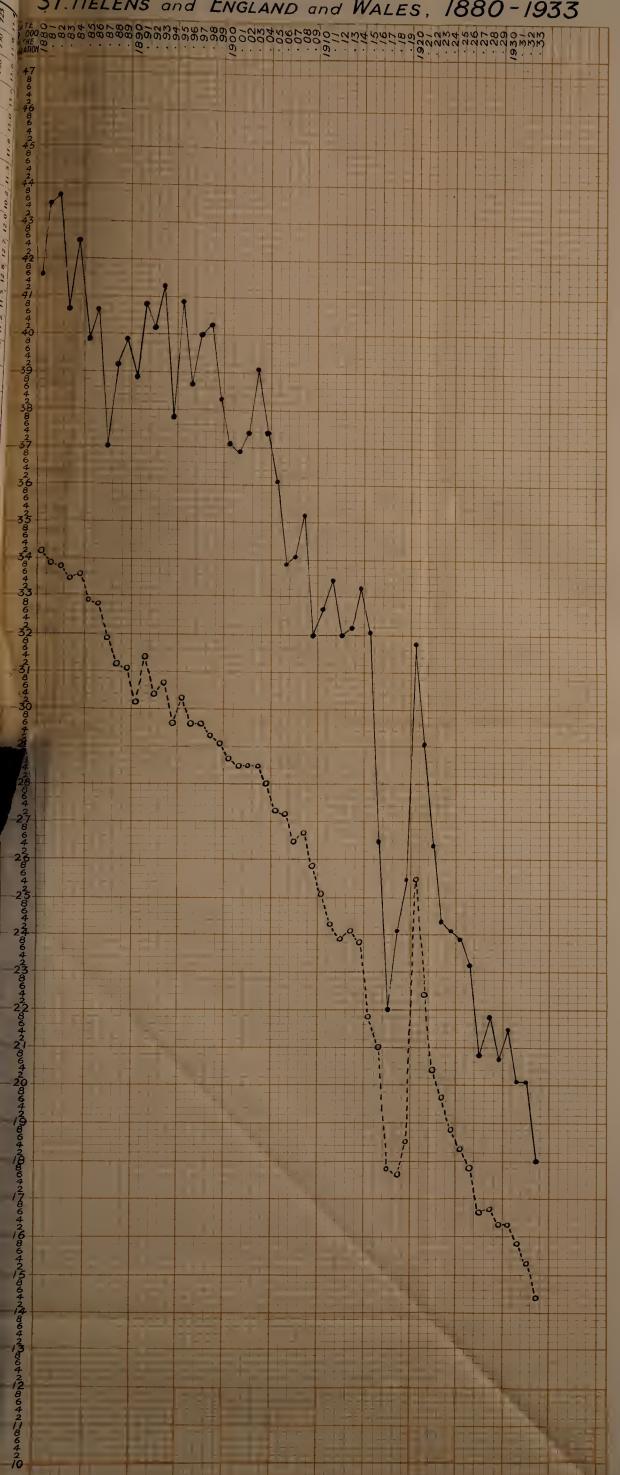




Table 6.

WARD	Number of	Birth-rate	Number	Death-rate
	births	per 1000	of	per 1000
	notified	population	deaths	population
Central East Sutton	116	20.6	97	17.2
	274	21.6	152	12.0
	180	15.4	164	14.0
	225	19.4	157	13.5
	210	14.3	200	13.6
	362	23.9	249	16.5
	307	18.5	215	13.0
	136	19.8	103	15.0
	213	16.8	166	13.1
Total England and Wales	2023	18.8 14.4	1503	14.0 12.3

MARRIAGES.—The number of marriages during the year was 723, giving a rate of persons married of 13.4 per 1,000 of the population. Table 5 shows the rate for past years.

DEATHS.—The number of deaths occurring within the borough during the year was 1,466. This total includes 175 deaths in St. Helens of persons usually resident in other areas, but excludes 212 deaths of persons usually resident within the borough which occurred in other areas, so that the actual number of deaths assignable to St. Helens is 1,503. This gives a death rate of 14.0 per 1,000 of the population, compared with a death rate of 11.4 per 1,000 for 1932. The death rate for England and Wales for the year was 12.3 per 1,000. 34% of the deaths during the year occurred in public institutions.

A comparison of the death rate in St. Helens for quinquennial periods since 1881 and for the years 1930, 1931, 1932 and 1933 with the rate for England and Wales during the same period is seen in the following statement:—

						Death Rate per	1,000 of the population.
		Perio	od.			St. Helens.	England
						(Crude).	and Wales.
1881-85				*****	*****	23.2	19.4
1886-90	•••••				•••••	22.5	18.9
1891-95		*****		• • • • • • • • • • • • • • • • • • • •		21.8	18.7
1896-190	00	•••••			•••••	20.3	17.7
1901-05				*****		19.0	16.0
1906-10				*****		16.9	14.7
1911-15						19.8	14.3
1916-20		*****		*****		16.6	14.4
1921-25		•••••				12.3	12.1
1926-30		******		•••••		12.3	12.1
1930				•••••		11.4	11.4
1931		*****		*****		12.5	12.3
1932						11.4	12.0
1933	*****	*****			*****	14.0	12.3

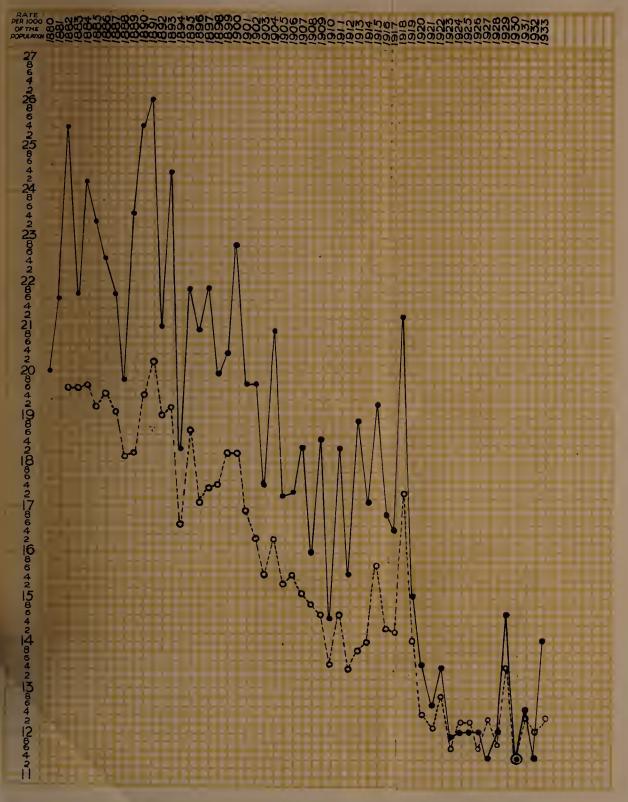
For the increased death rate in 1933 the severe epidemic off influenza was very largely responsible. Not only was there a very large increase in the number of deaths directly attributed to this disease, but its influence is seen in the very considerable increase in the number of deaths recorded from pneumonia, bronchitis and other respiratory diseases and from heart disease. The increase which occurred in the number of deaths in infancy and early life was very largely due to the presence of a severe epidemic of whooping cough.

Table 6 gives the number of deaths in the different wards during 1933, and Table 8 shows the death rate in the borough and for England and Wales since 1880.

Seasonal Deaths.—The following statement gives the number of St. Helens deaths in each quarter of the year, with the death

TABLE 8.

DEATH RATE - ST. HELENS & ENGLAND & WALES. 1880 - 1933.



The death rates are not corrected for age Esex distribution.

5t. Helens - England & Wales o-----



78

rate for each quarter, and the death rate for England and Wales for the same periods.

	De	ath	rate
per	1,000	of	population.

					•	• •
			No.	of Deaths.	St. Helens	England & Wales
First Quarter		•••••		607	22.6	17.1
Second Quarter		See		294	10.9	10.8
Third Quarter				245	9.1	9.4
Fourth Quarter	•••••			357	13.3	12.0

Coroner's Inquests.—During the year, 132 deaths were reported to the Coroner. In 53 of these the Coroner was able without an inquest to issue a certificate attributing the death to natural causes. In one instance the Coroner adjourned the inquest till 1934, and, in 78 instances where inquests were held, the deaths were recorded as attributable to:—

Colliery accidents					 	5
Street accidents		••••	••••		 	18
Accidents in works					 	2
Drowning				•••••	 •••••	7
Poisoning				••••	 	7
Scalds and burns					 	5
Other deaths from	violenc	ce			 •••••	15
Natural causes					 	14
Other causes					 	5

Causes of Death.—Figures relating to the causes of and ages at death during the year are given in Table 9.

Table 9.

Causes of, and age at, death during 1933.

)	A 11		· / · · · · · · · · · · · · · · · · · ·		۸۰	Ages					_
Causes of Death	Sex	All Ages	0-1	1-	2—	5—	15—	25-			55-	65-
All Causes	F M	823 680	143 81	41 33	30 30	39 23	35 31	36 32	66 49	79 68	93	12
Typhoid and paratyphoid fevers		2						_		<u></u>		-
Measles	M F	8		3	5	1	_					-
Scarlet fever	M F			1	1							-
Whooping cough	M F	30 22	10 7	12 7	6 7	2		_				
Diphtheria	M F	3 5			2	3 2			=	<u></u>		-
Influenza	M F	64 37	5 1	3	4	1	3	5 3	10 5	14 7	8 3	
Encephalitis lethargica	M F	1							<u> </u>			
Cerebro-spinal fever	M F	2		1		1						
Tuberculosis of respiratory system	M F	48 31			<u> </u>	3	9 12	9	9 5	11	6	
Other tuberculous diseases	M F	10	3	1	1	2	1	<u> </u>		_	1	-
Syphilis	M F	1		_			_				1	-
General paralysis of the insane, tabes dorsalis	MF	1		_	_	_		_			1	_
Cancer, Malignant disease	M F	66 65		_					6	14	17	2
Diabetes	M F	8		_			1	2	2	1	1 2	_
Cerebral haemorrhage, etc	M F	35 42				_		_		5 5	6 8	11
Heart Disease	M F	112 106		_	=		6 2	2 4	7 4	10	19 26	41 31
Aneurysm	M			_					=			
Other circulatory diseases	·M F	22 15	_						2		2 3	,
Bronchitis	M	62 47	11 5	3	1	1	2	1	2	5 2	7 8	2
Pneumonia (all forms)	M	108 69	33 15	11	8	11 5	5	5	15 5	7 4	8 6	
Other respiratory diseases	M F	5 3	=		<u> </u>			_	1	1	2 2	_
Peptic ulcer	MF	6	_					1	1		3	-
Diarrhœa, etc	F	7	4 7	1	1	<u> </u>		_		_	i	-
Appendicitis	M F	6 5				3		1	1	1	1	
Cirrhosis of liver	M F	1			_				=	=		
Other diseases of liver, etc	M					_				=	_	
Other digestive di se ases	MF	7 8	6 4	=	- 1	=	=	=		_	1	-

Table 9—continued.

			2 B 19					A 11 A 1	4				
Causes of Death	Sex	All Ages	0-1	1—	2—	5— —	Ages 15-	25-	35-	45-	55-	65-	75-
ute and chronic nephritis	M F	9 18			<u> </u>	1	1		2	4	3 6	2	1
erperal Sepsis	F	1						1					
her puerperal causes	F	10	_			_	2	4	4		_	_	_
ongenital debility, premature birth, malformations, etc.	M F	61 31	61 31	_	_	_	_	_	_	_		_	=
nility	M F	35 45		_	_		_	_	_	_	1	9	25 34
icide	M F	6				_	_		3 2		1	1	Ξ
her violence	M F	36 20	1 2	2	4	4 3	3	6	6	3	3 2	3 2	1 5
:her defined diseases	M F	60 51	9	4 2	3	6 2	3 4	3	2 5	6	12	8 6	4 2
uses ill-defined or unknown	M F	7 4	_	_	_	_		_	_	_	3	1 2	3
Totals		1503	224	74	60	62	66	68	115	147	200	280	207

Zymotic Death Rate.—The number of deaths caused by the "seven principal epidemic diseases" during 1933 was 89, giving a zymotic death rate of 0.83 per 1,000 of the population as compared with 0.22 during 1932. Compared with the previous year there was a marked increase in the number of deaths from measles and whooping cough.

The causes of these deaths during 1933 were as follows:—

Diarrhœa and enteritis (u	ınder 2	2 years)				12
Whooping Cough					••••	52
Measles					••••	12
Scarlet Fever		•••••				2
Diphtheria (including me	embrar	nous cre	oup)			8
Fever (enteric, typhus, a	nd sim	ple con	tinued	fever)		3
Smallpox	•••••				*****	0

Table 3 shows the figures since 1884.

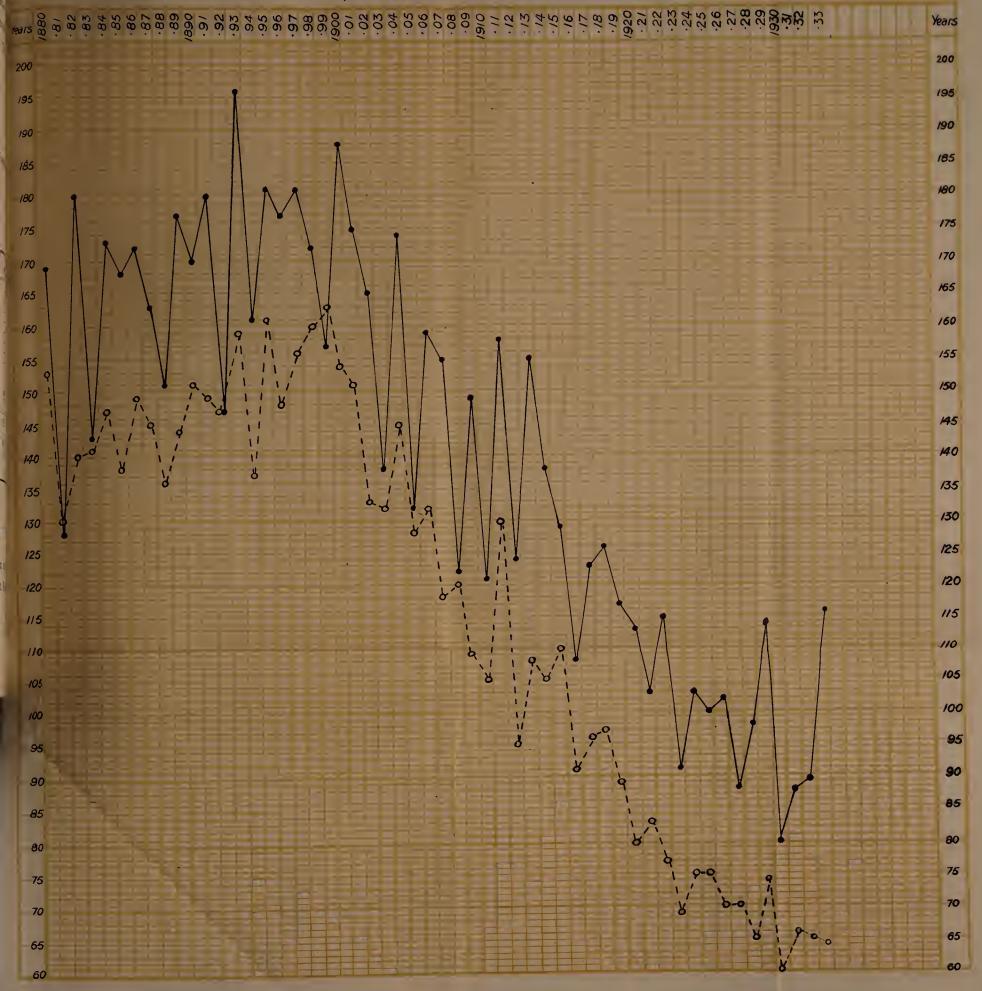
Deaths from Tuberculosis.—Tuberculosis was the cause of 90 deaths during the year—that is 5.99% of all deaths belonging to the borough. Of these deaths, 79 were attributable to tuberculosis of the lungs and 11 to other forms of tuberculosis. The ages at which these deaths occurred are shown in Table 9.

Malignant Diseases.—The deaths from these diseases during the past six years were as follows:—

AC	Œ			1928	1929	1930	1931	1932		19
Under I year				1	1	_				-
1—2 years	,				_	_	_	_		-1
23 ,,	*****			_	1					
3—4 ,,				n-mining.		_	_			()
4—5 ,,	*****	*****			_	-				-
5—10 "		•••••			-					-
10—15 ,,	•••••	*****			_	_				
15—20 ,,	*****	*****			1	2	_			
20—35 ,,				3	4	$\tilde{2}$	1	5		
35—45 ,,	*****	•••••	•••••	10	ġ	7	8	6		11
15 65	*****			54	48	49	61	64		50
65 and over	*****	*****		53	38	42	51	53		58
ob and over	******	*****				72				J.,
Tota	als	*****		121	102	102	121	128		131
Percentage of th	o total d	laatha		9.11	6.38	8.19	8.94	10.43		8.:
Death rate per				1.09	0.93	0.19				
Death rate per	1,000 01	populati	on	1.09	0.73	0.93	1.12	1.19		1.4
Death rate per	VV/_l_	populati	on,	1 42	1 44	1 45	1 40	1 51		1 4
England and	waies			1.43	1.44	1.45	1.48	1.51	134.34	1.1

There would appear to be no relationship between the incidence of malignant diseases and industrial processes in St. Helens.

INFANT MORTALITY RATE, S. HELENS AND ENGLAND AND WALES - 1880-1933





Other causes of death.—The following extract from Table 9 shows some of the other principal causes of death:—

			Percentage of Total
	N	lumber	Deaths.
Pneumonia (all forms)	1	77	11.78
Bronchitis and other Respiratory Diseases	1	17	7.78
Influenza	1	01	6.72
Heart Disease	2	18	14.50
Cerebral Haemorrhage, etc.		77	5.12
Suicide and other deaths from violence	•••	66	4.39

Infant Mortality.—During 1933 there were 224 deaths of children under one year of age. This corresponds to an infant mortality rate of 115.5 per 1,000 births. The infant death rate for 1932 was 89.4.

Further reference to this subject is made in the Maternity and Child Welfare Section.

Table 10 shows the infant death rate for St. Helens since 1880, and the figures for England and Wales for the same period.

III.—INFECTIOUS DISEASES.

The following are the infectious diseases compulsorily notifiable to the Medical Officer of Health in St. Helens:—

Smallpox

Scarlet Fever

Diphtheria and Membranous

Croup

Enteric Fever

Typhus Fever

Relapsing Fever

Continued Fever

Dysentery

*Pneumonia

Cholera

Plague

Puerperal Fever

Puerperal Pyrexia

Cerebro Spinal Fever

Acute Poliomyelitis

Acute Polio Encephalitis

Acute Encephalitis Lethargica

Ophthalmia Neonatorum

Erysipelas

Malaria

†Measles and German Measles

†Whooping Cough

Tuberculosis (all forms)

†Notification by medical practitioner is not required if the disease "has occurred in the same family or institution and been notified within the period of two months immediately preceding the date on which he first becomes aware of a further case."

Table 11 shows the total number of cases notified during the year, the total number of deaths which occurred, and the numbers admitted to the Corporation Hospitals.

Table 12 gives the age distribution of the cases notified, and Table 9 the age distribution of the deaths which occurred. The number of cases notified during each week of the year is shown in Table 13, and the number of notifications each year during the past 10 years is seen in Table 14.

^{*}Acute Primary Pneumonia and Acute Influenzal Pneumonia.

Table 11.

Infectious Diseases, 1933.—Total number of cases notified, number of cases admitted to hospital, and the total deaths.

DISI	EASE			Notifications received	Cases admitted to hospital	Total Deaths
Puerperal Pyrexia Erysipelas Pneumonia Ophthalmia Neonator	 rum	•••		203 281 11 	203 275 9 - 2 8 15 14	
D 1. 1.'.	 ica		•••	 12 1 10 1 4092 1580	5 1 8 — 32 32 32	2 1 3 — 12 52 —

Table 12.

Age distribution of cases of Infectious Diseases notified during 1933.

DISEASE	Notifications received.	Under 1	1	2	3	4-	5	10	15	20	35—	45	65—
Typhus Fever Scarlet Fever Diphtheria Pneumonia Erysipelas Puerperal Fever Puerperal Pyrexia Ophthalmia Neonatorum. Enteric Fever Poliomyelitis Encephalitis Lethargica Cerebro Spinal Fever Dysentery Whooping Cough Measles Malaria Smallpox	281 203 469 80 2 12 6 11 12 1 10 1 1580	- 1 3 43 - - 6 - - - 185 159 - -	7 4 41 1 - 2 - 2 - 2 196 310		 19 12 35 3 209 507 	35 21 26 — — — — 1 — 226 757 —		- 33 40 33 1 - - 3 1 - - 22 117 -	7 14 28 2 — 2 — 2 — 1 18 —	- 5 20 46 16 2 9 - 1 2 - 1 1 - 1 19 -	- 1 2 41 20 - 3 - 1 - 1 - 1		- - 9 5 - - - - 1 - -

Table 13.

Infectious Diseases.—Number of cases of Infectious Diseases notified each week in 1933.

	notified each week in 1933.														
Week Ending	Cerebro Spinal Fever	Diphtheria	Dysentery	Encephalitis Lethargica	Enteric Fever	Erysipelas	Measles	Malaria	Ophthalmia Neonatorum	Pneumonia	Poliomyelitis	Puerperal Fever	Puerperal Pyrexia	Scarlet Fever	Smallpox
Jan. 7 14 21 28 Feb. 4 11 18 25 Mar. 4 11 18 25 Apl. 1 8 15 22 29 May 6 13 20 27 June 3 10 17 24 July 1 8 15 22 29 Aug. 5 12 19 26 Sept. 2 9 16 23 30 Oct. 7 14 21 28 Nov. 4 11 18 25 Dec. 2 9 16 23 30 Total	1 - 2 3 - 1 - 1	2 33123225315121 24 13 68891355333465348865441398736 203				1 1 2 1 5 - 2 1 3 - 2 - 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	51 67 24 16 32 36 33 36 21 50 36 55 49 46 47 41 35 31 28 16 15 24 17 63 87 56 122 57 100 66 42 57 101 89 149 149 149 149 149 149 149 149 149 14		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	21 32 45 45 43 41 31 54 54 76 78 43 41 33 31 23 12 40 59 53 89 67 11 71 12 96 11 14 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	1 - 1 - 1 1		1	3 2 4 2 6 8 4 1	

Table 14.

Notifications of Infectious Diseases received during the undermentioned years.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Diphtheria Scarlet Fever Enteric Fever Puerperal Fever †Puerperal Pyrexia Pneumonia Erysipelas	89 163 2 17 — 126 40	145 241 7 16 — 242 70	103 153 1 7 10 256 42	131 206 1 6 23 209 70	153 1111 1 11 20 263 80	170 506 2 16 25 491 77	162 255 3 17 13 251 72	121 148 1 7 8 226 52	86 147 	203 281 11 2 12 469 80
Ophthalmia Neonatorum Poliomyelitis Continued Fever Encephalitis	34 1	16 1 —	23 	23 —	20 	24 9 —	14 	3 _	7 —	6 12 —
Lethargica Polio-Encephalitis Dysentery Malaria	4 -	2 -3 -	3 -6 -	2 - 1 1	3 - 13 -	-	$\frac{2}{2}$	1	1 15 -	- 1 - 1
Measles Whooping Cough Cerebro Spinal Fever Smallpox Typhus Fever	3513 235 2 — 8	1850 920 2 —	1625 304 2 —	2892 448 — —	1465 649 — 2	1995 685 1 —	1026 516 — —	2332 43 — —	512 394 17 —	4092 1580 10 —

[†] Notifiable since 1st October, 1926.

GENERAL OBSERVATIONS.—The year 1933 was characterised by an inordinately high incidence of the more common infectious diseases, i.e. scarlet fever, diphtheria, pneumonia, erysipelas, measles and whooping cough. The number of notifications of diphtheria, measles and whooping cough exceeded by a considerable margin any corresponding figures recorded during the last ten years.

There was, too, a small outbreak of enteric fever, and cerebro spinal meningitis made an unwelcome reappearance in the early part of the year. A minor epidemic of anterior poliomyelitis also manifested itself. All these, however, are more particularly discussed in the sections which follow.

SMALLPOX.—No case of smallpox was notified during the year.

The extent of vaccination in St. Helens since 1901 is shown in Table 15.

Table 15. Vaccination returns since 1901.

YEAR	2 Vaccin- ated	3 Insus- ceptible	4 Dead	Con- scientious Objector	6 Post- poned	7 Re- moved	Unaccounted ∞	Percentage not Vaccinated including Columns 5, 6, 7, 8
1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932	2,639 2,788 2,977 2,940 2,923 2,733 2,810 2,858 2,720 2,731 2,750 2,646 2,499 2,654 2,352 2,056 1,702 1,861 1,999 2,452 2,234 2,143 2,144 2,227 2,150 2,084 1,984 1,984 1,990 1,782 1,852 1,724 1,712	4 4 8 7 3 5 9 18 8 3 9 4 6 11 2 4 4 0 2 1 2 7 1 7 2 8 7 5 8 8 3 9 4 9 4	391 342 325 341 270 318 257 248 241 255 277 294 296 281 189 186 158 201 189 223 179 185 139 156 147 151 145 149 139 122 116 125	11 7 2 10 6 8 24 70 81 131 148 216 339 348 367 287 267 281 385 553 530 411 261 157 234 237 196 242 288 317 329 352	29 12 6 10 10 12 19 11 9 3 5 12 14 6 9 3 1 8 4 12 6 5 4 6 8 14 10 8 8 5 7 8 8 8 8 9 8 9 8 9 8 9 8 9 8 8 8 9 8 8 9 8 9 8 9 8 9 8 9 8 8 9 8 8 9 8 8 8 8 9 8	59 58 62 42 29 39 49 35 33 26 23 27 22 34 39 6 40 25 18 29 27 10 12 10 9 20 16 11 11	24 34 11 25 18 22 17 20 11 19 14 4 9 24 15 24 45 19 18 23 17 23 22 25 26 14 11 19 15 12	4.4 3.8 2.6 2.8 2.1 2.8 3.7 4.5 4.7 6.0 6.5 8.7 13.0 13.0 15.3 14.6 15.7 14.5 17.8 19.8 20.6 17.8 12.17 8.24 11.45 11.62 10.67 12.26 15.3 16.09 17.39 18.32†

[†] Of the 18.32 per cent unvaccinated, 16.79 per cent. are conscientious objectors.

SCARLET FEVER.—During 1933, 281 cases were notified and 275 of these were admitted to the Isolation Hospital. In 2 cases of uncommon severity the disease proved fatal. From January until

September a small but steady number of cases occurred. They were generally of wide distribution and could not be said to constitute an epidemic. From September to the end of the year, however, there was an increased prevalence, especially in one district. Difficulty in controlling the infection arose not only from the large number of children in the affected area but also from the mild and benign nature of some of the cases, in consequence of which they passed unrecognised. Throughout the last four months of the year strict supervision of the appropriate schools was maintained and, though the customary methods of prevention of spread were rigorously practised, cases continued to occur with little remission until the end of the year.

The following statement shows the age distribution of all cases occurring and of the deaths:—

	No. of	No. of	Case
Age	Cases	Deaths	Mortality
Under 5 years	86	2	2.3 %
5—15 years	182	_	
Over 15 years	13	—	

Cases are discharged from hospital, if clean, i.e. free from complications, discharges, blemishes, etc. at the end of 28 days, but during 1933 the average duration of stay was 35.0 days. The longer period was mainly accounted for by the greater number of septic and "spotty" cases. One case, a girl aged two years, developed an acute mastoiditis which was operated on successfully by the Council's Consultant Throat and Nose Surgeon.

Throughout the year anti-scarlatinal serum was again freely used in all the more serious and especially in septic cases.

DIPHTHERIA.—During 1933 there was a pronounced increase both in the incidence and in the virulence of this disease in St. Helens. In all, 203 cases were notified and in 8 of these the issue was fatal. Some 50% of the cases were of a severe type while some 10% were of the very grave variety.

In part, the relatively high number of cases was founded on a localised school epidemic which commenced at the beginning of Throughout that month cases traceable to the school concerned occurred at intervals of a few days until at the end of the month 10 cases had been notified. During this period, though a most rigorous supervision was maintained and swabbing of noses and throats of all the school children and teachers was carried out, it was only at the end of the month that an intermittently discharging otorrhoea in a school child was discovered and found bacteriologically positive. After the isolation of this child however cases still continued to occur and, by the end of July, 10 more cases had occurred. The outbreak then appeared to subside but a fortnight later cases began to reappear. The explanation appeared to be that in a family of three school children, one of whom was undergoing home treatment under the care of the private medical attendant for "tonsillitis" (the other two being in attendance at school), the true diagnosis was only revealed by the onset of a palatal paralysis. One of these children proved to be a "carrier," and, after the segregation of all three, the school epidemic subsided and in the last quarter of the year the outbreak was well under control.

The following statement shows the age distribution of the cases occurring in 1933:—

Age.	No. of cases.	No. of Deaths.	Case mortality.
Under 5 years	45	2	4.4%
5—15 years	119	5	4.2%
15—45 years	3 6		
Over 45 years	3	1	33.3%

Diphtheria anti-toxin is available for medical practitioners either at the office of the Medical Officer of Health or at the Borough Isolation Hospital. Too little use is made, however, of this service. Medical practitioners are too prone to wait until the diagnosis is confirmed by bacteriological examination or until the case is removed to the Isolation Hospital. There is serious danger in this delay. The earlier the serum is administered the greater is the chance for complete recovery. Experience has abundantly shown that it is very much better to give a dose of serum to a doubtful case which proves negative than to miss the beneficial effects of early administration in a case which proves to be true diphtheria.

No attempt has yet been made to detect susceptibles among the general community and to immunise them against diphtheria, but it is hoped to inaugurate a scheme for this in the near future.

ENTERIC FEVER.—11 cases were notified during the year, of which 3 proved fatal.

The majority of the cases occurred in the Sutton Manor and Gartons Lane district. The first indication of the presence of the disease was the notification (on the 14th February) of a suspicious case which had been admitted to a local general hospital. On investigation the case proved to be a definite typhoid and died on the 17th February. In following up this case, another case in the same family was found at home and a third case at Whiston Infirmary, neither of whom was suspected as typhoid until enquiries were instituted. It was also found that a sister of the original case notified had died nearly a fortnight before the original case was notified, her death being certified as due to pneumonia.

The next case came to our notice on the 7th March, when a patient was sent into the Isolation Hospital as scarlet fever but was found on admission to be suffering from typhoid. In following this

case up it was found that this family lived in close proximity to and were cousins of the family in which the first batch of cases occurred. As a result of investigation 3 cases of typhoid were found among this second family.

The next case brought to our notice was a notification on the 29th May of a case in the same local hospital as the original. On investigation of this case it was found that the patient had been in hospital for nearly a month and had been operated on for appendicitis—typhoid not being suspected until a few days before the patient's death. In following this case up, it was found that a daughter of the patient had been seriously ill with some ill-defined illness some two or three weeks before Easter and a Widal test left little doubt that she had had typhoid at that time. This family lived just round the corner from the second family referred to.

The original source of the infection was never discovered. The father in the original family had typhoid fever in 1916 and it is just possible that he may have been a carrier, though, owing to the length of time since his attack and the fact that he did not appear to have shown signs of being a carrier previously, it is doubtfull whether he was actually the infecting cause.

No further cases were discovered during the year in the Sutton Manor district. There was, however, a further notification from an entirely different part of the town, which on investigation proved to be a case of true typhoid. The source of the infection in this isolated case could not be identified. It was neither preceded nor succeeded by any further case in the locality and made a complete recovery in the Borough Isolation Hospital.

In addition there were two cases of paratyphoid B fever in the borough during the year, both girls aged 8 and 13 years respectively. The dates of notification were the 4th September and the 25th October. The homes of these girls were a considerable distance

apart as well as the dates of onset of the disease, and no connection between them could be established. Both were admitted to the Borough Isolation Hospital and made complete recoveries.

No further true cases of either disease have since come to our notice.

*MEASLES.—4092 cases were notified during the year, this being the highest number since 1923. The largest number of cases occurred towards the end of the year from October to December. The maximum number of cases occurring in any week was 252 in the week ended the 30th December, 1933.

The disease was generally of an unusually severe type with a fair proportion of pulmonary complications. 12 deaths occurred.

The following statement shows the age distribution of the cases and the deaths:—

	Ages.	No. of cases.	No. of deaths.	Case mortality.
Under	· 5 years	2110	11	0.52%
5—15	years	1945	1	0.05%
Over 1	15 years	37		

As mentioned in previous Reports, hospital accommodation is available for these cases at the Isolation Hospital and home nursing can be obtained from the St. Helens and District Nursing Association on request. During the year, 32 cases were admitted to hospital and the district nurses paid 959 visits to 42 cases for home nursing.

Note.—Further details regarding this disease will be found in that section of the Report dealing with Maternity and Child Welfare, page 60.

*WHOOPING COUGH.—During 1933 there was a severe epidemic of whooping cough which was the continuance of and epidemic which commenced towards the end of the preceding year. During the year 1580 cases were notified and 52 deaths occurred. The epidemic reached the climax about the end of February and abated towards the end of June.

The age distribution of the cases and of the deaths was as follows:—

Ages.	No. of cases.	No. of Deaths.	Case Mortality.
Under 5 years	1034	49	4.7%
5—15 years	543	3	0.55%
Over 15 years	3		

*PUERPERAL FEVER AND PUERPERAL PYREXIA.—2 cases of puerperal fever and 12 cases of puerperal pyrexia were

notified during the year, and 1 death was reported as due to puerperal sepsis.

*OPHTHALMIA NEONATORUM.—6 cases were notified during 1933.

CEREBRO SPINAL MENINGITIS.—During the Spring of 1932 there had arisen a small outbreak of this disease and subsequently throughout the year sporadic cases had occurred, the last of these being notified on the 16th December, 1932.

In 1933 there was again an increase in the number of cases. During the first three months of the year 8 cases were notified, but following this only 1 case occurred in May and 1 in October, and

^{*} Note.—Further details regarding this disease will be found in that section of the Report dealing with Maternity and Child Welfare, page 60.

In all, 10 cases were notified during 1933 and there were 4 deaths due to this disease. In one case, however, the death was certified as due to "meningitis" and consequently it would not appear to have been attributed to cerebro spinal fever in the Registrar General's statistics. 2 of the deaths occurred at home before the notification was received and in neither was the diagnosis confirmed bacteriologically nor was any serum treatment administered. Subsequent investigations indicated, however, that both were true cases of cerebro spinal meningitis. All the other cases were admitted to the Isolation Hospital and received serum treatment. 2 of them, however, succumbed within a few days of admission. On the whole the type of the disease in the series was very severe.

As is to be expected in this disease, which so frequently is spread by healthy carriers, very little association could be traced between the cases. The history of one case, however, suggested association with one of the general hospitals. In this case (a girl aged 7 years) the father was in hospital and was being visited by the mother there at the time of onset of the girl's illness. From this hospital, while the father was an in-patient (though in another ward), a case of cerebro spinal meningitis was removed. Swabbing of all likely contacts in the hospital failed, however, to reveal any carrier.

ACUTE POLIOMYELITIS.—During the early part of the year there was a distinct though small outbreak of poliomyelitis. In all, 12 cases were notified, but, of these, it was impossible to confirm the diagnosis in 2 which terminated fatally shortly after notification. Subsequently the information obtained greatly favoured the view that the diagnosis of poliomyelitis was in both cases incorrect. These cases (female adults aged 32 and 29 years respectively and notified on the 29th January and the 27th June) were the only adults in the series.

In another case who refused to go to the Isolation Hospital there remained some doubt as to the accuracy of the diagnosis. The evidence available, however, suggested that it could be accepted as a true case.

On the other hand a review of the total number of cases revealed that 2 quite definite cases escaped notification. Both of these were young children and were discovered through our maternity and child welfare centres—one in March and the other in April. Both showed established paralysis and furnished other evidence pointing conclusively to a diagnosis of anterior poliomyelitis. They have consequently been included here.

It appears, therefore, that there occurred during 1933, 12 true cases, of which 5 were admitted to the Borough Isolation Hospital In all but 2 cases of the series paralysis was distinctly established before the cases came under the notice of the health department. In these 2 cases, however, there was distinct flaccidity of the affected parts.

All the cases except one were placed under the care of the Orthopaedic Surgeon.

In no case was convalescent serum given owing to the difficulty of obtaining the necessary serum coupled with the fact that practically all the cases had passed the acute or pre-paralytic stage before coming under notice.

On investigation of the home conditions no unusual feature of common occurrence was detected. Overcrowding was found in only one case, and the families generally were not in distress of impoverished circumstances. In two instances the case affected was an only child, the others belonging to families of various sizes.

No association among the cases was discovered, though it was noted that in each of two widely separated districts a group of three cases occurred in houses situated in fairly close proximity.

ENCEPHALITIS LETHARGICA.—Only 1 case was discharged during the year. The patient, a man aged 35 years, showed thirly characteristic clinical symptoms and was admitted to the Gorough Isolation Hospital from which he was discharged after making a satisfactory recovery.

During the year, the death was registered as due to chronic pidemic encephalitis of a case which had been in the County Mental Aospital, Rainhill, but no previous notification of this case had been seceived.

ERYSIPELAS.—During 1933 there were 80 notifications and two deaths were attributed to this disease.

DYSENTERY.—Only one case was notified during the year. This occurred in the County Mental Hospital, Rainhill.

MALARIA.—No case was notified during the year.

NON-NOTIFIABLE ACUTE INFECTIOUS DISEASES.

During the year, 123 cases of mumps and 421 cases of chicken pox came to the notice of the health department. The cases of mumps occurred mainly during the month of November, the largest number in any one week being 26 in the week ended the 26th November.

Cases of chicken pox began to appear in June and continued until August, the highest number for any one week being 39 in the week ended the 8th July.

In the Spring there was a severe epidemic of influenza and lol deaths were registered as directly due to this cause, compared

with 49 during the previous year. These deaths, however, did not represent the total damage caused by influenza. During 1933 there was a considerable increase in deaths from bronchitis, pneumonia and other respiratory diseases (294 deaths were registered as occurring from these diseases in 1933 compared with 221 in 1932) and in deaths from heart diseases (173 deaths in 1932 and 218 in 1933), and there is no doubt that many of the deaths registered under these causes resulted from influenzal attacks.

The number of deaths from diarrhoea, etc. in children under 2 years of age was 12. Epidemic diarrhoea is, however, practically unknown and the majority of these deaths resulted from gastric and intestinal disturbances of a non-infectious character.

BOROUGH ISOLATION HOSPITAL.—This hospital is situated at Peasley Cross and has accommodation for 94 beds. There is no resident medical officer, the cases being treated by the patients's own private practitioners. The Medical Officer of Health, however, controls all admissions and discharges and exercises general supervision over all cases. Consultant services are supplied by the Corporation as required if the patient is unable to pay the cost.

As mentioned in previous Reports and especially commented on in my Report last year, there is great want at this hospital of small ward accommodation for the isolation of the very varied assortment of diseases now admitted to the hospital. It is hoped, however, that proposals at present under consideration for the conversion of one of the large blocks into cubicles will be proceeded with before the end of the current year.

Cases are also admitted to this hospital from the Urban District of Haydock,

At the beginning of the year there were 34 patients in hospital. New cases admitted during the year numbered 695, making a total number of 729 patients dealt with. At the end of the year there were 92 patients remaining. The highest number of patients under treatment at any one time was 96, and the lowest 32.

The details of admissions and discharges are shown in Table 16.

Table 16.

Peasley Cross Isolation Hospital.

Hospital Diagnoses of cases treated during 1933.

DISEASE	In hospital Jan. 1st, 1933	Admitted	Discharged	Died	In hospital Jan. 1st, 1934
Scarlet Fever Diphtheria Puerperal Fever Puerperal Pyrexia Venereal Disease Measles Other Diseases Mothers with sick babies Babies with sick mothers		295 149 3 4 32 204 7 1	250 128 2 3 	2 11 1 1 31 - 47	63 17 — — 8 4 — —

Of 295 cases of scarlet fever admitted, 7 (2.37%) were return cases, that is, cases apparently infected within the arbitrary time limit of 28 days by patients discharged from hospital. In all instances the suspected infecting cases were absolutely clean clinically, i.e., free from sores and discharges from the mucous membranes (nose, throat and ear) at the time of leaving hospital.

Visits to the homes of the discharged cases revealed that one had contracted a "common cold" seven days after returning home; one showed impetiginous sores on the face; one had developed a

nasal discharge; and one had had an attack of nose bleeding some hours after discharge, but had since shown no other abnormal feature. Of the remaining three, two were perfectly clean and one had developed all the characteristics of a relapse two days after discharge.

AMBULANCE PROVISION.—Two motor ambulances are kept at the Isolation Hospital to convey patients to any of the Corporation Hospitals, and a Morris Van for the conveyance of bedding, etc. During the year the total distance travelled was 16,446 miles.

Though urgent cases are at all times conveyed to the hospital without delay, there is no regular night ambulance service.

DISINFECTION.—Disinfection of premises by means of formalin sprays is carried out by the disinfectors from the Medical Officer's Department, and bedding and articles of clothing, etc. are disinfected by steam or other appropriate method at the Borough Isolation Hospital. During the year the disinfectors dealt with 4,645 premises, and the numbers of articles disinfected at the Isolation Hospital were as follows:—

			A	Articles.
Blankets, Sheets and Rugs			 	9,020
Hospital Clothing and Beddi	ng		 	6,290
Pillows and Cushions			 	5,207
Mattresses, etc.			 	1,910
Other Articles of Clothing		•••••	 	6,230
Library Books			 	96
Other Articles	*****	•••••	 	4,115

There is no municipal cleansing station, but facilities for the cleansing and disinfection of persons and their belongings are afforded at the Borough Isolation Hospital. School children are also removed to this Institution for compulsory cleansing when required.

IV.—LABORATORY WORK.

The majority of the routine bacteriological and pathological examinations are carried out by the medical staff at the Borough Laboratory at the Town Hall, but bloods for the Wasserman reaction and specimens of an unusual nature are examined at the City Laboratories, Liverpool. Table 17 shows the numbers of specimens dealt with during 1933.

Outfits for the collection of specimens of sputa, blood specimens, throat swabs, etc., are supplied free of charge.

Table 17.

SPECIMENS.		Results	
Si LCHVILIAS.	Number Received	Positive	Negative
Swabs for Diphtheria	3217 879 48 102 151 89	165 286 24 23 47 24	3052 593 24 79 104
Total	4486	569	3917

Specimens requiring chemical analysis are dealt with by the Public Analyst at his laboratories.

V.—TUBERCULOSIS.

INCIDENCE.—During 1933, formal notifications under the Regulations were received in respect of 107 cases of pulmonary and 60 cases of non-pulmonary tuberculosis. In addition, however,

12 new cases came to the knowledge of the department from the following sources:

		Non-
	Pulmonary	Pulmonary
Death Returns of cases not previously	•	
notified	6	1
Posthumous notification	1	
Transfers from other areas	2	1
Notification of admission to a hospital		
outside the borough of a case not		
previously notified	1	—
		_
	10	2

The total number of new cases for the year was, therefore, 179, of which 117 were pulmonary and 62 non-pulmonary. At the end of 1933 there remained on the Tuberculosis Register 534 cases of pulmonary and 351 cases of non-pulmonary tuberculosis. The age grouping of the new cases and of the deaths that occurred during the year is shown in Table 18.

Table 18.

Particulars of new cases and of deaths during 1933.

		New	Cases		Deaths			
Ages	Puln	nonary	onary Non-Pulmonary		Puln	nonary	Non-Pu	lmonary
	Males	Females	Males	Females	Males	Females	Males	Females
Under 1 year 1 to 5 years 5 to 10 years 10 to 15 years 20 to 25 years 25 to 35 years 35 to 45 years 45 to 55 years 55 to 65 years 65 upwards	3 6 13 13 12 8	2 3 6 6 8 14 5 3 2	5 7 10 8 3 1 2 —	- 6 9 2 3 1 3 1 1	- - 3 3 6 9 9 11 6	- 1 - 5 7 11 5 - 1	3 2 1 1 1 - 1 -	- - - - - - - - - - - - - - - - - - -
Totals	68	49	36	26	48	31	10	1

Though the formal notifications do not represent the total number of new cases each year, they form a fairly accurate guide to the incidence of the disease. The gradual fall in incidence since notification commenced in 1912 is seen in Table 19, which also shows the fall that has occurred in the death rate from tuberculosis.

Of the 107 cases of pulmonary tuberculosis for which formal notification was received during 1933, 27 died during the year and the average duration of life after notification in these cases was 49.3 days. In 9 cases death occurred within one week of notification.

Table 19.

Number of cases notified and number of deaths each year, 1912 to 1933.

	No. of notification	Primary as received.	Dea	ths		per 10,000 pulation
Year	Pulmonary	Non- Pulmonary	Pulmonary	Non- Pulmonary	Pulmonary	Non- Pulmonary
1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933	130 253 207 203 189 198 144 150 221 179 167 141 154 141 140 129 139 130 119 110		91 100 113 99 127 121 107 99 82 102 78 85 118 97 91 74 84 91 73 103 72 79	65 90 65 56 41 42 34 31 37 32 39 27 27 25 32 22 21 24 26 17 16	9.27 10.05 11.2 10.7 14.1 13.3 11.8 9.8 7.9 9.7 7.3 8.0 10.8 8.8 8.2 6.5 7.6 8.3 6.7 9.5 6.7 7.3	6.02 9.0 6.45 6.07 4.5 4.64 3.75 3.08 3.53 3.05 3.66 2.52 2.48 2.28 2.92 1.90 2.2 2.4 1.6 1.5 1.0

MORTALITY.—During 1933 there were referable to the borough 90 deaths from all forms of tuberculosis, giving a Tuberculosis Death Rate of 8.3 per 10,000 of the population. Of these

deaths, 79 were due to pulmonary tuberculosis and 11 to non-pulmonary tuberculosis, giving a pulmonary death rate of 7.3 per 10,000 of the population and a non-pulmonary death rate of 1.0.

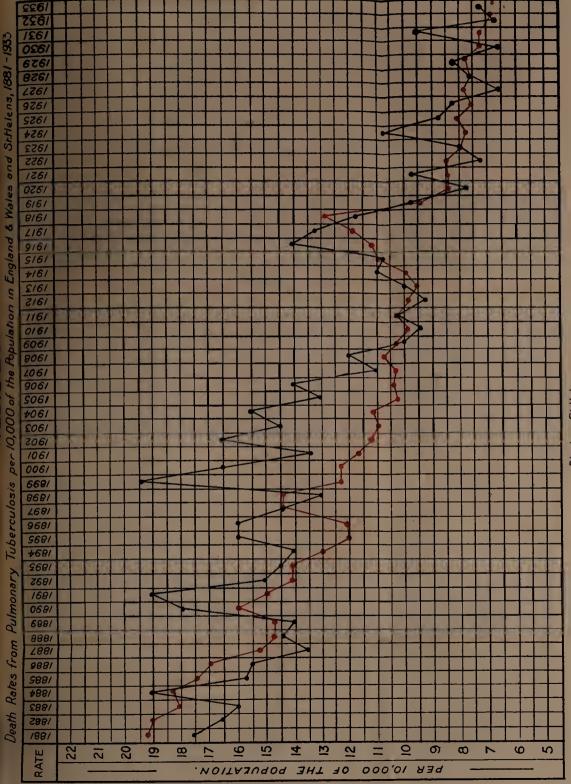
The pulmonary death rate of 7.3 per 10,000 for 1933 is slightly higher than the rate for 1932, when it was 6.7, but has been lower only in the years 1927, 1930 and 1932. Two peaks occurred in the pulmonary death curve during the year, one in January concurrently with the influenza epidemic and one in November during the long spell of foggy weather. The death rate from this form of tuberculosis since 1881 is shown in Table 20.

The non-pulmonary death rate of 1.0 per 10,000 is the lowest ever recorded in St. Helens, and it would appear as if non-pulmonary tuberculosis as a cause of death has lost much of the terror it possessed two decades ago.

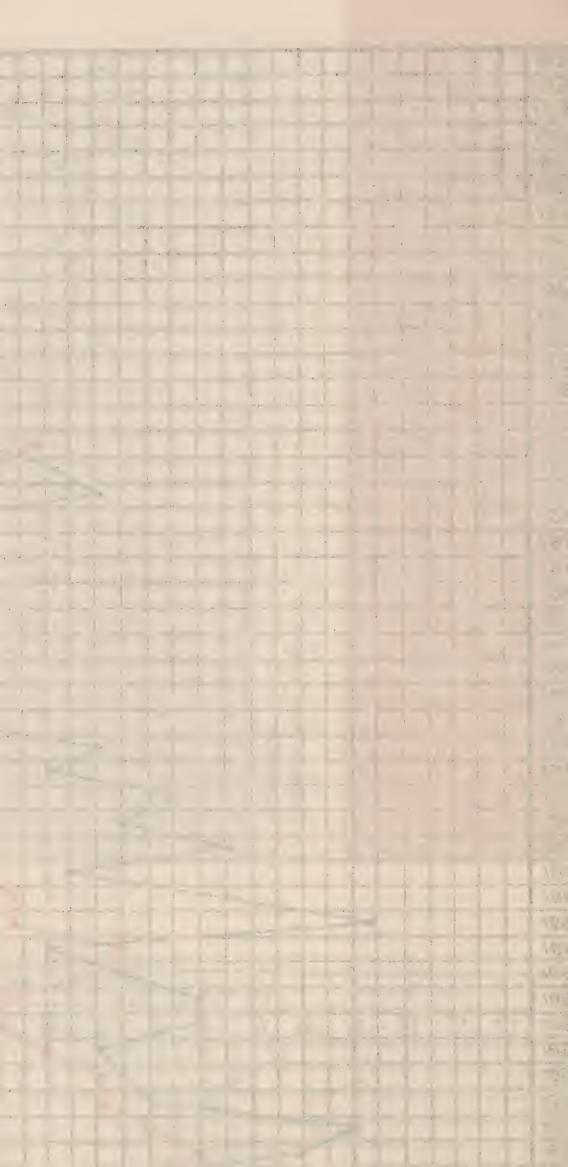
The ages at which the deaths occurred are shown in Table 9 and the number of deaths and the death rate from each form of the disease since 1912 in Table 19.

TUBERCULOSIS DISPENSARY.—The focus of activity in a tuberculosis scheme is essentially the dispensary and, if the dispensary is to do good work, it requires not only a good Tuberculosis Officer but he should have at his disposal all modern aids to diagnosis and methods of treatment. In the latter respects, St. Helens is sadly lacking. The present premises are not only dull and dismal and uninviting to the patient, but, owing to the inadequacy of accommodation, modern methods cannot be practised to the best advantage. I would again urge the provision of new premises fitted in accordance with all modern requirements.

Five sessions are held weekly at the Dispensary for ordinary cases and one session weekly for X-ray therapy. A record of the work in connection with the dispensary during the past five years is shown in Table 21(a).



Slack: St. Helens. Red: England and Wales.



Record of work at or in connection with the Tuberculosis Dispensary during the years 1929—1933.

		1020	1020	1001	1022	1000
		1929	1930	1931	1932	1933
1.	New cases examined for the first time	295	251	228	266	241
2.	first time	42	54	51	86	130
).	or returned after discharge from the Register	11	7	9	4	3
	Total	348	312	288	356	374
4.	New cases and contacts diagnosed to be tuberculous: Pulmonary— Adults ,, Children Non-pulmonary—Adults ,, Children	69 14 10 22	82 18 9 37	74 11 10 24	83 29 9 32	67 15 9 24
	Total	115	146	119	153	115
5.	. Contacts diagnosed to be tuber- culous (included in item 4)	2	1		6	5
6	Removed from Dispensary Register as :— Non-tuberculous Recovered Dead (all causes) Transferred to other areas or lost sight of	188 22 77 15	206 18 60 26	181 29 79	192 12 69 30	254 90 73 30
	Total	302	310	301	303	447
7	. "Recovered" cases restored to Register (included in items 1 and 4)					1
8	on 31st December:— Diagnosis completed: Pulmonary— Adults ,,, Children Non-Pulmonary—Adults ,,, Children Diagnosis not completed: Adults Children Children	141 52 203	252 155 59 233 29 45	260 165 57 246 7 25	281 175 66 260 14	264 171 55 230 9
					813	740
	Total Paristance	771	773	760		740
	Pulmonary cases on Registers on 31st December which were T.B.+	*	*	93	110	120
10 11 12	titioners (personal and other) . Sputum examinations		85 175 —	141 162 —	201 150 —	110 256 133
13	6. Home visits by Tuberculosis Officer	76	85	156	160	113
14	Home visits by Nurses or Health Visitors	. 2059	1572 2 7 15	1556 27 87	1581 2644	1578 2928

Expressed as a ratio per 100 deaths from tuberculosis, there has been during the past five years considerable increase in the number of persons coming to the dispensary for examination. In 1929, 293 new cases and contacts were examined per 100 deaths from tuberculosis and this gradually increased to 412 in 1933. One of the chief reasons for this increase was the increase in the number of contacts examined.

During the year special attention was paid to the revision of the Dispensary Register, and this has resulted in the removal of a large number of old cases in whom no evidence of active disease had existed during many years.

At the X-Ray Department 44 cases of tuberculous adenitis and 18 cases of tuberculous skin affections made 586 attendances for treatment. As mentioned in previous Reports, however, this form of treatment cannot be considered wholly satisfactory and should be replaced by artificial sunlight.

For diagnostic purposes, however, the new X-ray plant installed during the year has been most valuable and has increased very considerably the value of the clinic as a consultation centre.

During 1933, 241 new cases and 130 contacts were added to the Dispensary Register and 3 cases were transferred from other areas; 90 cases were discharged from the Register as recovered; 254 were written off as non-tuberculous; 73 died; and 30 were transferred to other areas or were lost sight of. This left at the end of the year 740 persons on the Register. Table 21(b) shows the condition at the end of 1933 of all patients on the Dispensary Register.

Home disinfection of premises and bedding was carried out in 604 instances, being a decrease of 139 as compared with the previous year.

Table 21(b).

PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1933 of all patients remaining on the Dispensary Register; and (b) the reasons for the removal of all cases written off the Register.

The Table is arranged according to the years in which the patients were first entered on the Dispensary Register as definite cases of pulmonary tuberculosis, and their classification at that time.

				Prev	ious to	1926		T		19	926			_	1927		1	Ī		192	8		ī		1929	o	-	1		1930		-	1	_	1001	_			_				1				
Come	lition at the t	time of the			Class T	B. pl	lus		C	lass T	. B. ph	us		CI	ass T.	B. plu	s		1		Т. В.	plus		i	Class '		Jue	-	-		. B. plu				1931			_		193				-,	193		
last r	lition at the t ecord made to which t	during the									-				-				-	-				-	Class	1. D. ş	Jus			lass 1	D. PIL	18			lass T.	B. plu	15			Class T	.B. pl	lus -		C	lass T	T.B. plu	is
year	relate	the return	Class T. B. minus	Group 1	Group 2	Group 3	Class T. B. plus	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1.	Group 2	Group 3	Total (Class T.B. plus).	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	B. r	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. Minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)	Class T.B. Minus	Group 1	Group 2	Group 3	Total (Class T.B. plus)
	Disease	Adults F.	5	_	_	-	-	2	-	-		-	1	-	-	_	-	6	1-	_	-	-		-	_	_	_			1	_															_	
	Arrested	▼ F.	4				() —	2	-	E		-			_	_	_	1	-	1-				-	_		_	_					1		-							-					
er.		Children	8		_	-	-	3	-	-		-	3	_	=			9	Ī-	-	-	=	7	_	-		-	6		-	-																
on Dispensary	Disease	Adults F.	-11	1	3	4	8	5	-	-	-	-	2	1	2	_	3	2	1-	T-	-	-		-	7-		2	3	1	6	2	q	2				_	10					9				
of Des	not Arrested	₹ F.	4	1	1	-	2	2	-	1	1	2	1		-	_	=	2	_	1	-		3	-	2			8		1	_	-1	10		+	2	- 7	5		4	6			4	12	7	23
ng on on 31s	Arrested	Children	4	_	1	2	3	7	-		-	-	5			_	1	10	_	-		-	3	-	-			4	_		_		7	-				27		3	6	9			8		12
Remaining Register o	Condition tained do yea	n not ascer- uring the ar.	13	3	1	_	4	8	1	1	-	2	14	1	-	-	1	14	-	1	_	1	9	-	-	1	1	12	2	2	-	4	5	_	2	_	2	12	4		-	4	14		_	_	
(a)	Register	Dispensary at 31st ember.	49	5	6	6	17	29	1	2	1	4	26	2	3	-	5	44	_	2	-	2	25	-	2	3	5	33	3	10	2	15	25	1	4	4	9	54	6	8	12	26	30	6	21	10	37
	D'. l	1 S M.	28			-	1	1				_	-	_	_				_		-		_	_		_			_				_	-/	_	-	_								- 1		
er om.	Discharged	V F.	24		_	E	-	3			-	_		_	_	-	_	1	_	_	_			_			_			-	-	_	_	-1					_								_
egiste	Recovered	Children	34	_		-	-	4		-	-	_	2			_	_	_	_	-	-	_		-	-		_	-		-	-	-		_}			_ -		_ -		_		_	_	-		_
Dispensary Register for removal therefron	Lost sight otherwise from Disp Regi	removed pensary	207	4	6	10	20	57	2	-	_	2	23	1	_	_	1	29	1		-	1	20	_	1	_	1	33	1	1	1	3	5	2	-	_	2	1		_	<u>-</u> -	_					
uo us	Dead	Adults	52	5	19	48	72	14	4	3	28	35	12	1	_	25	26	15	_		17	17	15	_	4	13	17	8	4		14	23	5	3	1	15	10	-		8	14	21					
ot now d reaso	Dead	PV F.	26	4	10	31	45	17	2	8	14	24	9	-	-	9	9	7	_	_		18		_							10			-	-			-	1				2				
Not and		Children	8		1	10	11	2	-	-	5	5	3		1	4	5			Ė				_							2			2		2					-	12				8 -	8
(9)	Total wri Dispensar	ritten off ry Register	379	14	36	99	149	98	8	11	47	66	49	2	1	38	41	55	1	1	36	38	47	_	5	29	34	43	11					11	1		40	3	3	12	22	27	7			1	
GRAND	Totals		428	19	42	105	166	127	9		48		75	4	4	38	46	99	1	3	36	40		_	7	32	39	76	14			61		12		32			9		22	-	33	6		14 24	

NON-PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1933 of all patients remaining on the Dispensary Register; and (b) the reasons for the removal of all cases written off the Register.

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al Glands	S	Abdomi	Bones and Joints	Total	Peripheral Glands	Other Organs	Abdominal	Bones and Joints	Total	Peripheral Glands	Other Organs	Abdominal	Bones and Joints	Total	Peripheral Glands	Other Organs	Abdominal	Bones and Joints	Total	Peripheral Glands	Other Organs	Abdominal	Bones and Joints	Total	Peripheral Glands	Other Organs	Abdominal	Bones and Joints	Total	Peripheral Glands	Other Organs	Abdominal	Bones and Joints	Total	Peripheral Glands	Other Organs		Bones and Joints	Total	Peripheral Glands	Other Organs	Abdominal	Bones and Joints	at the time of the made during the nution the return relates.	Condition Sast record Year to Y
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During the year no case came to notice in which action was required under the Public Health (Prevention of Tuberculosis) Regulations, 1925, (control of tuberculous persons employed in the milk trade), nor has it been necessary to obtain compulsory removal to hospital of any patient under the Public Health Act, Section 62.

There are no arrangements under the Tuberculosis Scheme for the provision of home nursing in St. Helens, but many of the cases are dealt with by the St. Helens and District Nursing Association. Shelters are not provided in St. Helens.

The dispensary service must, however, be considered incomplete without some after-care service. Large sums of money are spent yearly in providing institutional treatment, and, though the services of the dispensary are available for advice after discharge from the Sanatorium, the majority of these patients require far more assistance than can be given from official sources. In looking after the family while the father or the mother is in the sanatorium, in dealing with problems of insufficient food, bedding and clothing, in helping towards better house accommodation and suitable employment, and in many other ways, a well organised voluntary committee could do much to help these patients towards recovery and prevent those relapses that so frequently occur under present conditions. Unfortunately, there is no such committee in St. Helens

NON-PULMONARY TUBERCULOSIS.—During 1933, 62 patients suffering from tuberculous glands or from lupus made 586 attendances for X-ray treatment. The need for an ultra violet ray apparatus for the treatment of these lesions is more apparent than ever, but there is no accommodation for such an installation in the present dispensary premises.

Treatment for bone and joint tuberculosis in children is provided under the Council's orthopaedic scheme, and, though there is no definite scheme for dealing with adults, arrangements are now in force whereby bone and joint conditions in adults requiring operative treatment are dealt with at one of the Liverpool hospitals. An increasing number of these cases has also been admitted to Eccleston Hall Sanatorium for convalescence and the services of the orthopaedic surgeon, Mr. McFarland, have been retained for regular consultation in regard to them. I would suggest the extension of the orthopaedic scheme to include all bone and joint tuberculosis. Further reference to orthopaedic treatment is made in the Orthopaedic Section of the Report.

During the year, patients suffering from the following types of disease received in-patient treatment:—

Bones and joints	24
Abdominal	9
Other organs	2

DENTAL TREATMENT.—In-patients at Eccleston Hall Sanatorium are examined regularly by the dental surgeon and minor treatments such as extractions, fillings, etc., are carried out and in special cases dentures are supplied. There is no special scheme for dealing with patients attending the Dispensary but urgent cases are from time to time referred to the dental surgeon for treatment.

INSTITUTIONAL TREATMENT.—Institutional treatment for cases of tuberculosis in St. Helens is provided as follows:—

(a)—Eccleston Hall Sanatorium:—maintained by the St. Helens Corporation. This institution contains 70 beds with accom-

modation for approximately 28 men, 18 women, and 24 children. The institution is primarily for pulmonary tuberculosis, but non-active non-pulmonary cases are admitted as and when necessary.

Like many similar institutions, Eccleston Hall has undergone a process of evolution and should now be classed as a combined sanatorium and pulmonary hospital. Modern methods of treatment wave been adopted, gold therapy is being made use of and, with the corovision of the new X-ray plant at the Dispensary, the addition of a new day room and certain alterations to existing rooms that are being carried out, it is expected that collapse therapy and lipiodal examination will be available by the end of the current year.

Education of child inmates, able to attend, is carried out at the sanatorium school, and bedside tuition is given to those medically fit to benefit therefrom.

- (b)—Four beds are reserved at the Liverpool Sanatorium, Delamere, for early pulmonary cases.
- (c)—Seven beds are reserved at the Leasowe Open-Air Hospital for Children, for non-pulmonary cases.
- (d)—Occasional beds are taken as and when required for special cases at various institutions.

In addition to the above, 60 beds are available and used as required for pulmonary or non-pulmonary poor law cases at the Whiston Infirmary, Prescot.

Table 22.

Return showing the immediate results of treatment of definitely tuberculous patients and of observation of doubtful cases discharged from approved Residential Institutions during the year 1933.

-						Dura	tion o	of Res	identi	ial Tr	eat m e	ent in	the I	nstitu	tion.			
on a	sification drnission the	Condition at time of discharge		Jndei nonth			3—6 nonth	s		12 nonth			ore th		-	Γotals		C
insi	titution		Μ.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
	Class	Quiescent	_1	_	_	5	3	1	2	1	3	_	_	5	8	4	9	
	T.B.	Not Quiescent	2	. 1	2	1			1	_	3			5	4	1	10	
w	minus.	Died in Institution		<u> </u>	_	_	_		_	-		_			_	_	_	
Tuberculosis	Cl	Quiescent				_	_	_	_	_		1		_	1	_	_	
ercı	Class T.B.	Not Quiescent		_	_	_	_	_	_	_		_	_	_		_	_	
Tub	plus Group 1	Died in Institution		_	_			_		-	_		_				_	-
ıry	Class T.B.	Quiescent		_			1			_		1			1	1		
iona	plus	Not Quiescent	4	_		3			4	3	_	1	_	_	12	3	_	1
Pulmonary	Group 2	Died in Institution	1	_	_	1	_		1	1	_	2		_	5	1		
Frid	Class T.B.	Quiescent	_	_	-	_	_		1	_	_	_		_	1	_		. 1
	plus Group 3	Not Quiescent	1	1	1	_			1	1	_	1		_	3	2	1	
	Group 5	Died in Institution	5	3	_	1	2	_		1		3			9	6	_	I
	Bones	Quiescent						2	_		1	1		4	1		7	
	and Joints	Not Quiescent	_		_			Ī			_	_					1	
Sis	Joints	Died in Institution			_	_	_	_	1	_	_	_	_	_	1			
Tuberculosis		Quiescent	_	_		_	_	_	_	_	_	_	_	_		_		_
ber	Abdom-	Not Quiescent	_	_	_	_	_	_	2		_	-		_	2	_		:
	inal	Died in Institution	_	_	_	_	_	-	_		_	_	_	_	_	_		
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mor	Organs	Not Quiescent	'	_	_	_	_	_	_	_	_	1	_	_	1	_		1
-Pul		Died in Institution	_		_	_	-		_		_	_			_	_	_	_
Non-Pulmonary	Peri- pheral	Quiescent		_	_	_	_		-	-	-	_		_		_	_	
-	Glands	Not Quiescent	_	_	_	_	_		-	-	_	_	_	_	_	_	-	
		Died in Institution	-	_	_	_	_	_	_				_		_		-	_

Diagnosis from o	on discha bservatio					For any universely week	Гuber ——— der		ry s ay ove week					culosi S		er		Tota	ls
					M.	F.	Ch.	M.	F.	Ch.	M.	F.	ГСh.	<u>M</u> .	F.	Ch.	M.	F.	Ch
Tuberculous	***	•••	•••	•••	_	_	1		_	1			_			1		_	
Non-tuberculous	•••	• • •	•••	•••	3	1	_		1	1	1		_			5	4	2	-
Doubtful	•••	•••	•••	•••	_	_		_	_				_			_		_	-
	Totals	•••	•••	• • •	3	I	1	_	1	2	1	_		_	_	6	4	2	

[§] PULMONARY TUBERCULOSIS: Patients suffering from this disease are now divided into two classes, viz: Class T.B. minus, which comprises those patients in whose sputum tubercle bacilli have never been found: Class T.B. plus which comprises those cases in which tubercle bacilli have at any time been found.

Class T.B. plus is further sub-divided into three groups. Group 1 comprises early cases who will probably have their disease arrested by a period of Sanatorium treatment. Group 3 includes advanced cases and cases with grave complications, e.g., diabetes and tuberculosis of larynx or intestine. Group 2 includes all cases of Class T.B. plus who cannot be placed in groups 1 and 3.

Table 22 shows the immediate results of treatment of patients lischarged from residential institutions during the year, and Table 3 shows the extent of institutional treatment provided.

TABLE 23.Institutional Treatment during the year 1933.

(a)—in Non-Poor Institutions. Law In Admitted Discharged Died in In Institutions during the during the the Institutions on Jan. 1 year Institutions year on Dec. 31 Adult Males 4 4 dimber of doubt-Adult tly tuberculous 2 Females 2 ses admitted for observation 9 Children 2 9 2 Total 15 15 2 Adult 30 Males 48 35 15 28 edimber of definitely Adult poerculous patients Females 21 16 11 19 stimitted for treatment. Children 28 28 28 28 Total 74 97 74 22 75 Grand Total 76 112 89 22 77

(b)—i	n Poor I	Law Insti	tutions.			
		In Institutions on Jan. 1.	Admitted during the year	Discharged during the year	Died in the Institutions	In Institutions on Dec. 31
comber of pat-	Adult Males	5	15	12	3	5
us ts suffering m pulmonary	Adult Females	3	9	5	3	4
mitted for	Children		_	_	_	_
atment	Total	8	24	17	6	9
sumber of pat-	Adult Males	2	2	1		3
ts suffering tourn non-pulmon- der tuberculosis	Adult Females	_	2	2		
nitted for	Children	1	2	1	1	1
eratment	Total	3	6	4	1	4
Grand Total		11 .	30	21	7	13

VI.—VENEREAL DISEASES.

Treatment is carried out by the Staff of the Medical Officer's Department, female cases being dealt with by the female assistant medical officer. Bacteriological examinations are carried out at the Liverpool University.

During the year, 81 males and 119 females were treated at the centre and made a total of 4,681 attendances. No case required in-patient treatment. Table 24 gives further particulars regarding these cases.

Table 25 shows the number of new cases dealt with at the centre since 1923. It will be noted that there was a slight increase during the year in both syphilis and gonorrhoea and that the increase is in males. There was also a considerable increase in the number of non-venereal cases who attended (54 cases in 1933 as compared with 34 in 1932), and in this case the increase was mostly in females.

It is satisfactory to note that there has been an appreciable increase in the number of attendances of gonorrhoea cases in both sexes for intermediate treatment. This is a most important part of the treatment of these cases as treatment at home is never satisfactory.

Table 24.

Record of work carried out at or in connection with the Venereal Diseases Centre during 1933.

		Syph	ilis	Soft Cl	nancre	Gonor	rhoea	Condo other t	than	То	otals	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
plary uservation the very previous	of cases on 1st under treatment ation of cases removed register during ious year which	9	23	_	_	11	28	_	2	20	53	73
p er rep ribserva action renber of the fir	during the year port for treatment ation of the same of cases dealt with st time during the der report (ex-	Ī	4		_	2	_	-	1	3	5	8
ive of (n 4) somber to for ing to k	of cases under of cases dealt the first time he year under nown to have	6	11	_		30	18	19	32	55	61	116
eitres f	for the same in-	1				2	V	_ /	_	3	_	3
ion	ms 1, 2, 3 and 4	17	38			45	46	19	35	81	119	200
brged attreatment of cu	of cases dis- after completion ment and final ure (see Item 15)	2	2			13	7	19	30	34	39	7 3
sed to appletion mber	of cases which of attend before of cases which attend after com-	7	13			8	13	_	_	15	26	41
ore firmber	f treatment but nal tests of cure of cases trans-other centres or	_	_			_	_		_	_		_
institu private mber unde	e practitioners of cases remain- er treatment or	2	3			5	4		_	7	7	14
servati ber	on on 31st Dec-	6	20	_	_	19	22	_	5	25	47	72
of Ite	ems 5, 6, 7, 8 and	17	38			45	46	19	35	81	119	200
ilis ind	of cases of sy- cluded in Item 6 led to complete se of treatment	1	5	_		_				1	5	6
(a) for tion offi	of attendances— individual atten- n of the medical cers intermediate	145	297	_		353	114	22	55	520	466	986
trea	atment, e.g., irri- ion, dressing	5	_			2310	1377	3		2318	1377	3695
L ATT	ENDANCES	150	297			2663	1491	25	55	2838	1843	4681

Table 24—continued.

		Sypl	hilis	Soft C	hancre	Gonor	Thoea	Cond other Vene		Т	otals
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
12.	In-patients:— (a) Total number of persons admitted for treatment during the year (b) Aggregate number of "in-patient days" of treatment given		_	_	_	_		_	_	_	_
		Under	l year	1 and 5 ye	under ars	5 and 15 y	under years	15 ye and o		7	Totals
		M.	F.	M.	F.	M.	F.	M.	F.	M.	1
13.	Number of cases of congenital syphilis in Item 3 above classified according to age periods		1				5	1	1	1	

TABLE 25.

Number of Cases of Venereal Diseases dealt with for the first time during the years 1923 to 1933.

	Sypi	HILIS	Soft (Chancre	Gonor	RRHOEA
Year	Males	Females	Males	Females	Males	Females
1923	18	11		-	34	2
1924	19	15			30	9
1925	14	29	1	,	26	4
1926	36	40	2		33	9
1927	32	39	4	_	42	14
1928	44	26	3		62	11
1929	22	25	2		55	14
1930	16	32	1		40	14
1931	6	13			22	16
1932	3	11		_	24	21
1933	7	11	<u> </u>	_	32	18

IVII.—SUMMARY (for reference) of Nursing Arrangements, Hospitals, and other Institutions available for the district.

HOME NURSING.—The St. Helens and District Nursing Association, supported by voluntary contributions, maintain a superintendent, assistant superintendent and seventeen nurses to attend non-infectious cases in their own homes. 3,593 cases were nursed during the year, the total number of visits amounting to £103,334.

Arrangements are in operation for the Association to undertake for the Corporation the home nursing of cases of ophthalmia neonatorum, puerperal fever and puerperal pyrexia, and cases of measles and whooping cough in children under 5 years of age. Under these arrangements the district nurses made, during the year, a total of 1,970 visits to 42 cases of measles, 5 cases of ophthalmia neonatorum, 14 ecases of whooping cough, 11 maternity cases, and 6 other cases.

MIDWIVES.—No district midwives are employed or subtrivial by the public health authority. In exceptional cases, however, where the patient has been unable to do so by reason of poverty, the Council have paid the midwife's fee.

CLINICS AND TREATMENT CENTRES.—The following clinics and treatment centres are provided by the Corporation:

(1).—Maternity and Child Welfare Centres—Combined clinics for expectant and nursing mothers and for children under 5 years of age.

- (a) Town Hall Centre......Open, Monday, Wednesday and Thursday, 2 to 4 p.m. Form North and South Windle, Hardshaw, Derbyshire Hill and Parry Districts.
- (b) Albion Street ClinicOpen Tuesday and Friday, 2 to 0
 4 p.m. For North and South Eccleston and Central Districts.
- (c) Elizabeth St. Clinic Open Tuesday, 2 to 4 p.m. For Peasley Cross and Sutton Districts.
- (d) Gartons Lane Clinic Open Wednesday, 3 to 4 p.m. For Marshalls Cross, Sutton Manor and Clock Face Districts.
- (e) West Street ClinicOpen Thursday, 3 to 4 p.m. For Thatto Heath District.
- (2).—Ante-natal Clinics—For ante-natal cases only.
 - (a) Town Hall CentreTuesday, 2 to 4 p.m., and Friday, 2 to 4 p.m.
 - (b) Elizabeth Street Maternity and Child Welfare CentreThursday, 10 to 11 a.m.
 - (c) Gartons Lane Centre Wednesday, 2 to 3 p.m.
 - (d) West Street CentreThursday, 2 to 3 p.m.
- (3).—Gynæcological Clinic.—For diseases or disablements associated with child-bearing.

Town Hall Centre.....Tuesday, 11 to 12 noon.

(4).—School Clinic, Claughton Street.—For treatment of minor ailments, throat and nose defects, eyes and dental defects and the X-ray treatment of ringworm. Minor ailments are treated daily from 9 a.m. to 5 p.m. (Saturdays 9 a.m. to 12 noon) and other defects on special days. A scale of income has been drawn up for recovery of cost of treatment in non-necessitous cases.

District Clinics for the treatment of minor ailments are also open for a few hours daily at Derbyshire Hill, Sutton, Sutton Manor and Thatto Heath, and, after school dental inspection, Dental Clinics are held at Sutton, Sutton Manor and Thatto Heath for varying periods.

- (5).—Tuberculosis Dispensary, Claughton Street.—Open Monday from 10 to 11-30 a.m., Wednesday from 5-30 to 7-0 p.m., Thursday from 3 to 4-30 p.m., and Friday from 10 to 11-30 a.m. and from 6 to 7 p.m.
- (6).—Venereal Diseases Centre, Claughton Street.—Open for males on Monday, 5-30 to 7 p.m., and for females, Wednesday, 5-30 to 7 p.m. The centre is also open daily from 9 a.m. to 5 p.m. on Monday to Friday, and to 12 noon on Saturday, for irrigation, advice and prophylactic treatment.
- (7).—Orthopaedic Clinic.—At the Maternity and Child Welfare Centre, Albion Street. Orthopaedic Surgeon attends on 2nd and 4th Wednesdays of each month, from 2 p.m. to 4 p.m. Intermediate treatments are given by the orthopaedic nurse four days per week at Albion Street Clinic, and one day per week at the Elizabeth Street, Gartons Lane, and West Street Maternity and Child Welfare Centres.

HOSPITALS.—

Provided by the Council:-

- (1)—Borough Isolation Hospital, Peasley Cross. For Infectious Diseases (other than smallpox). Beds: 94. Resident staff: matron and 23-25 nursing staff. Admissions and discharges are under the control of the Medical Officer of Health, but patients are treated by their own medical practitioners. The Corporation provide specialist services in necessitous cases when required. Cases also admitted from the Haydock Urban District Council. A separate pavilion is reserved for cases of puerperal fever and puerperal pyrexia and for cases of ophthalmia neonatorum, and a small ward is reserved for cases of venereal disease.
- (2)—Eccleston Hall Sanatorium. For Pulmonary and convalescent or non-active Non-Pulmonary Tuberculosis. Total Beds: 70. Resident Staff: One medical officer, sister-in-charge and 15 nursing staff. Non-resident female teacher. Orthopaedic surgeon visits periodically. Cases not exceeding four in number are admitted from the Lancashire County Council.
- (3)—The St. Helens Maternity and Child Welfare Hospital, Cowley Hill. For Maternity cases and for Ailing and Debilitated Children. Beds: maternity, 15; ailing and debilitated children, 22. Resident staff: medical officer, matron, and 15 nursing staff.

Subsidised by Council:—

(1)—Sankey Smallpox Hospital for cases of smallpox. St. Helens pays an annual retaining fee to the Warrington Corporation and the costs of treatment of any patient admitted from St. Helens.

(2)—Whiston Infirmary, Prescot. Transferred from the Prescot Board of Guardians to the Lancashire County Council under the Local Government Act, 1929.—Total Beds available (including maternity and mental): 706, divided approximately:—

Medical	243
Surgical	62
Children	100
Maternity	25
Tuberculosis	60
Mental	216
-	
	706

The hospital has an up-to-date X-Ray installation and artificial sunlight apparatus. There is one resident medical officer and one non-resident, with a visiting oculist, visiting dentist and visiting orthopaedic surgeon, while the medical superintendent has authority to call in any specialist or consultant assistance if he wishes. The pathological work is carried out at the County Mental Hospital, Rainhill. The infirmary is used almost entirely for the reception of Poor Law cases, though a small percentage of private cases is admitted. By an arrangement with the Lancashire County Council, all Poor Law cases from St. Helens are admitted to this Institution.

(3)—An average of 8 beds is also retained at the Leasowe Open-Air Hospital for Children and 4 at Delamere Sanatorium, and inpatients are sent to other hospitals or institutions as required.

Other Hospitals.—The St. Helens Hospital.—Supported partly by subscribers and partly by contributions. For all medical and surgical non-infectious cases. Also 17 beds for maternity cases. Total accommodation about 135 beds. Out-patient department for Ophthalmic, Ear, Throat and Nose, and Gynaecological cases.

The Providence Free Hospital.—Accommodation for about 130 patients (general medical and surgical cases).

Ambulance facilities.—For infectious cases, two ambulances are maintained by the Corporation at the Peasley Cross Isolation Hospital. Both general hospitals maintain ambulances and these are used as required. The Police also maintain an ambulance for street accident cases.

VIII.—MATERNITY AND CHILD WELFARE.

NOTIFICATION OF BIRTHS.—Under the Notification of Births Acts, 2,023 live births and 123 still-births were notified during the year. For these, 1,985 notifications were received from midwives and 161 from doctors. The total number of births belonging to St. Helens for the year was 1,939 as compared with 2,160 in 1932, and the birth rate for the year was 18.0 per 1,000 of the population as compared with 20.1 per 1,000 during 1932. The birth rate for 1933 is the lowest yet recorded for the borough.

INFANT MORTALITY.—During 1933, 1,939 births were registered for St. Helens, and the deaths of 224 infants under one year of age occurred, giving an infant mortality rate of 115.5 per 1,000 births as compared with 89.4 for the previous year. Of the 224 deaths under one year, 217 were legitimate children and 7 illegitimate children, giving a legitimate infant mortality rate of 114.5 per 1,000 legitimate births and an illegitimate infant mortality of 159.1 per 1,000 illegitimate births. The infant mortality for England and Wales was 64 per 1,000 births, and for the 118 County Boroughs and Great Towns 67 per 1,000 births.

The principal causes of the deaths in 1933 were as follows:—

Congenital debility, malformations and	
premature birth	92
Pneumonia	48
Bronchitis and other respiratory diseases	16
Whooping Cough	17
Diarrhoea, etc.	11
Other Digestive Diseases	10
Tuberculosis	3
Influenza	6
Due to Violence	3
Other Causes	18
	erroren ferroren
	224

The following statement reviews the infant death rates per 1,000 births under the principal causes in the years 1928 to 1933.

	Infant Mortality per 1,000 Births.						
	1928	1928 1929 1930 1931 19					
Congenital Debility, mal- formation and prema-							
ture birth	44.49	39.39	39.27	41.32	42.59	47.44	
Pneumonia, Bronchitis and other respiratory diseases	24.53	32.32	17.07	19.74	25.00	33.01	
Measles and Whooping Cough	6.65	7.53	2.99	3.21		8.77	
Diarrhoea, etc	7.90	6.65	4.26	3.67	7.41	5.67	
All other Diseases	14.97	27.89	16.21	20.21	14.35	20.63	

The ages at which these deaths occurred during the past five years are shown in the following statement:—

Infant Mortality per 1,000 Births.

	1929	1930	1931	1932	1933
Deaths under 1 day old	15.05	13.23	16.99	14.83	14.44
Deaths 1 to 7 days old	13.28	13.23	13.77	14.83	15.47
Deaths 1 to 4 weeks old	15.05	14.08	10.56	9.72	15.47
Total mortality under 1 month old,					
i.e., neo-natal deaths	43.38	40.54	41.32	39.38	45.38
Deaths 4 weeks to 3 months old	15.05	10.67	11.02	19.91	19.03
Deaths 3 to 6 months old	18.15	13.65	13.33	10.65	18.57
Deaths 6 to 12 months old	37.19	14.94	22.48	19.44	32.49

The Infant Mortality for St. Helens for 1933 is the highest recorded since 1919 and is 16.1 points higher than that for 1932. From the above statements it will be seen that this increase is mainly in the two age periods 3 to 6 months old and 6 to 12 months old and is mainly attributable to the increase in the number of deaths from pneumonia and whooping cough. During 1933 there were severe epidemics of whooping cough, measles and influenza-diseases which always exact a heavy toll of infant life. 17 deaths attributable to whooping cough, 6 to influenza and 48 to pneumonia are recorded. No doubt many of the deaths attributed to pneumonia were really attributable to unrecorded whooping cough or influenza. Further, though no deaths are recorded as directly due to measles, the number of infants who were attacked was large (159 cases of measles in children under one year of age were notified) and the devastating effect of this disease on infant life is so great that the resistance of the children so infected would be so lowered as to make them especially susceptible to other diseases.

It is interesting to note that, though St. Helens had in 1933 the highest infant mortality of all the 17 County Boroughs in Lan-

cashire, more than half of these boroughs also experienced an increase in their infant mortality rate last year.

STILL BIRTHS.—The number of still births registered during the year was 123. Of these, 3 belonged to other districts and 1 which occurred in another district belonged to St. Helens, so that the total number belonging to St. Helens was 121. All the still births occurring in the borough were notified under the Notification of Births Acts.

The following statement shows the number of still births for St. Helens during the past six years compared with the number of live births and expressed as a percentage of the total live and still births.

Year	No. of Live Births.	No. of Still Births.	Total Births.	No. of Still Births expressed as a percentage of the Total Births.
1928	2405	105	2510	4.2
1929	2259	107	2366	4.5
1930	2343	108	2451	4.4
1931	2178	103	2281	4.5
1932	2160	104	2264	4.6
1933	1939	121	2060	5.9

Special enquiries are made into all still births that occur and, from such enquiries into the 123 cases notified in St. Helens during 1933, the cause of still birth in these cases would appear to be as follows, viz.:—

Condition in Mother.		Condition	IN	Сни	D.	
Renal disease Placenta praevia Accidental haemorrhage Difficult labour Cause not known Anaemia Syphilis History of injury, e.g. fall	10 14 12 11 4	Prolapse of cord Prematurity Monstrosity Malpresentation				12
• • • • •	 75					48

MATERNAL DEATHS.—During 1933, 11 deaths were registered as resulting from diseases or accidents of pregnancy and childbirth, giving a maternal mortality rate of 5.34 per 1,000 live and still births. The corresponding mortality rate for 1932 was 3.97. Table 26 shows the maternal mortality since 1911.

The special investigations into all maternal deaths commenced some years ago at the request of the Ministry of Health are being continued locally. In the course of these investigations last year it was found (as in previous years) that the number of maternal deaths as given in the Registrar General's returns did not include all deaths occurring during pregnancy or parturition. This resulted from failure to indicate the pregnancy on the death certificate, and four further deaths were discovered in which no doubt the pregnancy had considerable bearing on the fatal issue. These had been registered as (1) mitral disease, (2) acute uraemia and chronic nephritis, (3) acute influenzal pneumonia, and (4) nephritis, bronchitis, and influenza. If these deaths be included, the total number of maternal deaths in St. Helens during 1933 is increased to 15, giving a true maternal mortality rate of 7.3 per 1,000 live and still births as compared with a corresponding rate of 4.4. per 1,000 in 1932.

TABLE 26.
Maternal Mortality.

Year	No. of Live Births	No. of women registered as dying from diseases and accidents of pregnancy and child birth.	Maternal Mortality per 1,000 live births.	Maternal Mortality per 1,000 live and still births.
1911 1912 1913 1914 1915 1916 1917 1918 1919	3247 3137 3199 3357 2966 2599 2217 2435 2687 3334	10 6 9 17 16 9 10 13 18 17	3.08 1.91 2.81 5.06 5.39 3.46 4.51 5.34 6.7 5.1	
Average for years			4.3	_
1921 1922 1923 1924 1925 1926 1927 1928 1929 1930	3059 2813 2615 2628 2630 2561 2359 2405 2259 2343	15 11 3 17 14 11 8 11 13 12	4.9 3.91 1.14 6.47 5.32 4.29 3.39 4.57 5.75 5.12	
Average for years		-	4.5	
1931 1932 1933	2178 2160 1939	7 9 11	3.21 4.17 5.67	3.07 3.97 5.34

The following statement gives further particulars regarding each of the maternal deaths during 1933, together with the true causes of death.

	a high				and the second	
No.	Age	Number of pregnancy	Home Conditions	General Health	Ante-natal supervision	Remarks
1	40	13	Poor	Poor	Inadequate	Difficult labour due to pelvic tumour.
2	34	2	Comfortable	Poor	Nil	Mitral disease. Doctor not called in until pregnancy well advanced. Removed to hospital too late.
3	34	3	Comfortable	Poor	Satisfactory	Had recurrent attacks of acute rheumatism. Death due to endocarditis and influenza—confinement 2 days previous.
4	32	4	Good	Fair	Satisfactory	Influenzal broncho pneumonia.
5	36	3	Comfortable	Good	Inadequate	Patient refused ante- natal examination by midwife and would not attend ante-natal clinic. Death due to cardiac failure following a difficult delivery.
6	40	7	Poor	Poor	Inadequate	Placenta praevia. Warning haemorr- hage ignored by patient.
7	39	16	Poor	Poor	Nil	Eclampsia. Removed to hospital too late.
8	23	2	Poor	Poor	Nil	Pelvic peritonitis following abortion.
9	32	4	Poor	Poor	Nil	Post partum shock.
10	30	3	Comfortable	Poor	Nil	Chronic nephritis. Pregnancy caused acute uraemia.
11	20	1	Poor	Fair	Nil	Eclampsia. No advice sought early. Removed to hospital too
12	41	6	Comfortable	Poor	Inadequate	late. Advice sought too late. Eclampsia.
13	33	4	Poor	Poor	Inadequate	Eclampsia.
14	33	3	Comfortable	Good	Nil	Post partum haemorr- hage due to lacerated uterus.
15	36	5	Comfortable	Poor	Satisfactory	Continued ill health for 4 years. Nephritis and bronchitis—confinement 12 days previous.

In investigating these cases particular attention was paid to the question of ante-natal supervision. It will be seen from the above statement that this was considered satisfactory in only three cases, in 5 it was considered inadequate, and 7 patients received no ante-natal supervision at all.

INFECTIOUS DISEASES IN MOTHERS AND CHILDREN.—

Puerperal Fever and Puerperal Pyrexia.—2 cases of puerperal fever and 12 cases of puerperal pyrexia were notified, and 1 death was registered as occurring from puerperal sepsis. The corresponding figures for 1932 were 6 cases of puerperal fever and cases of puerperal pyrexia, with 2 deaths.

The subsequent diagnoses of the 14 cases notified were as blollows:—

Pelvic infection	1					6
Puerperal fever	r follo	wing al	bortion			1
Phlegmasia alb	a dole	ns		•••••		1
Constipation	••••	••••		•••••		1
Pneumonia	*****		•••••		•••••	2
Pulmonary tub	erculo	sis and	l puerpe	eral ma	ınia	1
Anaemia	•••••				•••••	1
Bronchitis	*****		•••••			1
						14

The fatal case was one of pelvic peritonitis following an abortion occurring spontaneously at three months, and demonstrates the potential gravity of such a termination of pregnancy.

For these cases beds are available at the Borough Isolation Hospital and, by arrangement with the District Nursing Association, home nursing can be supplied on request.

Of the cases notified, 10 were treated at the Isolation Hospital and 3 were nursed at home by the district nurses. The case of phlegmasia alba dolens occurred in one of the nursing homes in the borough and was removed to the Hospital for Women in Liverpool for treatment, the patient not being a resident of St. Helens. The patient with puerperal mania was admitted to the Isolation Hospital in the first instance; she was later transferred to the Whiston Infirmary and later to the Winwick Mental Hospital.

The services of the Consultant Obstetrician are available formathese cases and his advice was sought on two occasions.

Ophthalmia Neonatorum.—6 cases were notified during the year. One case was treated at the Isolation Hospital, and five cases were treated at home under the Council's arrangements with the District Nursing Association. All recovered with vision unimpaired.

Pemphigus.—14 cases of pemphigus neonatorum were notified during the year by midwives practising in the borough. Investigation of the cases showed that 13 of the cases occurred in the practice of one midwife, and immediate steps were taken to check the outbreak. The midwife was suspended from practices for fourteen days during which time her house and clothing were disinfected, and she purchased voluntarily two new midwifery bags to replace those previously in use. Arrangements were also made:

It the umbilical pads used in this midwife's practice to be sterilised by the department. These measures were successful in preventing that there cases in her practice.

Treatment at the Borough Isolation Hospital was provided our 6 of the cases and 5 other cases were nursed at home under the Council's arrangements with the District Nursing Association.

One of the cases occurring during the epidemic died.

Measles and Whooping Cough.—159 cases of measles on children under 1 year old and 1,951 cases in children aged 1 to 5 wears were notified during the year. No deaths were recorded as concurring in children under 1 year of age, but 11 deaths of children baged 1 to 5 years were registered.

185 cases of whooping cough were notified in children under year old and 849 cases in children aged 1 to 5 years. 17 deaths from whis disease occurred in the former age group and 32 in the latter.

By arrangement with the St. Helens and District Nursing Association, home nursing of these cases can be carried out by the district nurses, and beds are available at the Isolation Hospital for cases requiring hospital accommodation. During the year the services of the district nurses were asked for in only 35 cases of measles and 11 cases of whooping cough, and 21 cases of measles and 29 cases of whooping cough were admitted to the Isolation Hospital.

Other Infectious Diseases.—Table 27 shows the number of cases of infectious diseases which occurred in children under 5 years of age.

Table 27.

Infectious Diseases at ages 0—1 and 1—5 years.

				1933		
				Under 1 Year.	1—5 yrs.	
Scarlet Fever Diphtheria Pneumonia Erysipelas Poliomyelitis Cerebro Spin Whooping Co Measles Tuberculosis	al Fever ough (Pulmona (Non-Pul	monar	y)	1 3 43 — 185 159 — 5 6	85 42 141 2 8 4 849 1951 2 13	

INSPECTION AND SUPERVISION OF MIDWIVES.—

There were 44 midwives on the register as practising in the borough during the year and the qualifications of these midwives were as follows:—

Holding the Certificate of the Central Midwives' Board	37
Having other recognised certificates	6
Untrained	1

In addition to the above, 9 midwives are employed at the Council's Maternity and Child Welfare Hospital and 5 midwives are employed in the Maternity Block of the St. Helens Hospital. The matrons of both these institutions are also qualified midwives.

Inspections of midwives were carried out on 120 occasions by medical officers, and the health visitors paid 67 routine and 69 special visits for purposes of inspection and supervision. In 9 instances it was considered necessary to suspend a midwife from practice for 24 hours after contact with an infectious case to allow of the disinfection of herself and her appliances.

During the year the private midwives found it necessary to call medical practitioners to their assistance on 474 occasions. The reasons for sending and the number of occasions in which medical assistance was required were as follows:—

Number of cases attended by private midwives		1,547
Number and percentage in which medical assis was obtained		(30.6%)
Reasons for medical assistance :—		
(a) For abortions and premature labours	39	(2.5%)
(b) For ante-natal illnesses	33	(2.1%)
(c) For difficult labour	197	(12.8%)
(d) For suturing the perineum, expelling the placenta, excessive haemorrhage,		
etc.	109	(7.0%)
(e) For post-natal illnesses	43	(2.8%)
(f) For the child	53	(3.4%)

There has been a slight decrease in the percentage of cases in which medical aid was sought by the midwives in 1933. This decrease was mainly in cases in which a doctor was called in for

"difficult labour" and, though in part indicating the benefit of antenatal supervision in removing abnormalities, also indicates better midwifery. There has been occasion previously to draw attention to a tendency to hasten labour unduly and a decrease in this practice is to be welcomed.

During the financial year 1933-34, £673/3/0d. was paid to medical practitioners for these services, and £221/4/0d. was recharged to the patients.

PROVISION OF MIDWIVES.—Though no district midwives are directly employed or subsidised by the public health authority, the whole or part of the fee of the midwife in attendance is paid in exceptional cases where the patient is unable to pay by reason of poverty. Owing to the industrial depression and the very large number of persons who have now lost their insurance benefit, this service is increasing rapidly. During 1933 the whole or part of the midwife's fee was paid in 67 instances and the amount expended was £62/4/0d.

HEALTH VISITING.—The following statement shows the visits paid by health visitors during the year.

To expectant mothers:—		
(a) First visits		396
(b) Subsequent visits		289
To infants under one year :—		
(a) First visits	•••••	1,956
(b) Subsequent visits		12,707
To children, aged one to five years		20,956
Total Visits	٠٠٠٠٨	36,304

MATERNITY AND NURSING HOMES.—During the year another private nursing home was placed on the register and there are now four maternity homes registered in St. Helens under the Nursing Homes Registration Act, 1927. These have been periodically inspected and found to be satisfactory.

During the year 58 maternity cases were delivered in these homes.

Exemption from the provisions of the Act was granted by the Local Authority under Section 6 to the St. Helens Hospital and the Providence Free Hospital. In the maternity block of the St. Helens Hospital 233 cases were delivered.

MATERNITY AND CHILD WELFARE AND ANTE-NATAL CLINICS.—Combined clinics for expectant and nursing mothers and for children under 5 years of age are conducted at eight sessions weekly at five centres, and special ante-natal clinics are held five times weekly at four centres. Arrangements have been made during the current year for an ante-natal clinic to be held in the Girls' Institute, Parr, thus relieving expectant mothers in that district of the fatigue of travelling to the Town Hall Centre.

The attendances at these clinics during 1933 are shown in Table 28,

TABLE 28.

Attendances at Maternity and Child Welfare, Ante-Natal and Gynaecological Clinics.

1930—1933.

Maternity and Child Welfare Centres.	1930	1931	1932	1933
Expectant Mothers: Number attending No. of attendances	266 1165	250 886	196 773	128 5 7 6
2. Children: (a) Number who attended for the first time during the year and who, on the date of their first attendance,				
were :— (i) under 1 year of age	1364	1438	1413	1168
(ii) between the ages of 1 and 5 years	674	581	603	578
(b) Percentage of notified births represented by the number in 2 (a) (i)	56.62	65.27	63.85	57.73
(c) Number who attended and at the end of the year were— (i) under 1 year of age	†	†	1152	907
(ii) between the ages of 1 and 5 years	†	†	1633	1531
(d) No. of attendances by children— (i) under l year of age (ii) between the ages of l and 5	22641	24549	26733	24322
years	4416	2600	2866	3228
Ante-natal Clinics.	1110	1070	000	
No. of expectant mothers attending	1119	1078	990	954
No. of attendances by expectant mothers	3975	3959	4274	4195
Percentage of total notified births (live and still) represented by the number of expectant mothers who attended either			,	
the Maternity and Child Welfare Centres or the Ante-natal Clinics	57.5	57.6	51.2	50.4
*Gynaecological Clinic.				
No. of Mothers attending		. 21	117	154
No. of attendances		41	374	510

[†] Figures not available.

^{*} Clinic opened 6th October, 1931.

The decrease in the number of children attending and in the total number of attendances of children under 1 year of age was due to the high incidence of infectious diseases throughout the year. There was also, mainly for the same reason, a decrease in the number of children between the ages of 1 and 5 years who attended.

It is estimated that there are in St. Helens approximately 8,000 children between 1 and 5 years of age and, though approximately 400 attend nursery classes and are under the supervision of the School Medical Service, the small percentage of the remainder who attend the centres for regular medical supervision is a serious gap in the service. Even when they do attend the ordinary child welfare clinics their claims are apt to be overshadowed by the claims of infant brothers or sisters. As mentioned in my last Report, therefore, I would strongly suggest the provision of special "toddlers" clinics so that the health of these children could be efficiently supervised and many of the defects found on entering school avoided.

Though some expectant mothers still prefer as a matter of convenience to attend the combined clinics, the special ante-natal clinics give much better opportunity for regular medical supervision and for any special examinations required. During the year, 954 expectant mothers attended the special ante-natal clinics whilst 128 attended at the combined clinics, making a total of 1,082 mothers coming up for ante-natal supervision and advice. This represents approximately 50.4% of the total notified births during 1933. The number of mothers who attended during their first pregnancy was 272.

It is also found that mothers are realising more fully the wisdom of visiting the ante-natal clinics in the early months of pregnancy. This is seen by comparing the months of pregnancy when patients first attended the ante-natal clinics during 1933 with the corresponding

figure for 1932. The months of pregnancy when patients first attended are given below as percentages of the total number of cases attending.

				1932	1933
2nd	month	 •••••	*****	4.6%	8.9%
3rd	,,	 		6.5%	9.7%
4th	,,	 		10.3%	14.3%
5th	,,	 		19.2%	15.6%
6th	,,	 	*****	17.7%	21.1%
7th	,,	 		19.7%	15.2%
8th	,,	 		13.3%	12.2%
9th	,,	 		8.7%	3.0%

Among 954 mothers attending ante-natal clinics abnormalities requiring correction or treatment were discovered in 222 cases (23.3%). These abnormalities were :—

Contracted pelvis					31
Albuminuria		•••••			92
Cardiac disease					30
Hyperemesis gravidar	um		•••••		31
Abnormal presentatio	n				28
Exophthalmic goitre					6
Tuberculosis				•••••	4
				_	
					222

During 1933 a series of lectures on diets was given at the Albion Street Maternity and Child Welfare Centre and at the Town Hall Ante-Natal Clinic. These lectures were organised by the National Milk Publicity Council and were well attended and appreciated by the mothers.

Though there is no special post-natal clinic, advice regarding post-natal conditions is frequently given to mothers attending the maternity and child welfare clinics. Cases in which there is any reason to suspect abnormality or where more active treatment is required are referred to the Gynaecological Clinic.

GYNAECOLOGICAL CLINIC.—During the year, 62 postnatal patients attended the Gynaecological Clinic for examination and advice. 28 of this number required treatment for debility and anaemia, 4 were cases of albuminuria persisting after delivery and thus needing further treatment, and 5 had minor displacements of the uterus following parturition. The remaining 25 patients were considered to have recovered completely.

In addition to the above, 35 displacements of the uterus were dealt with, 5 being referred to hospital for operative treatment and the remainder being treated at the Clinic. 6 patients with menopausal symptoms and 2 with thyroid insufficiency also attended for advice and treatment, and 5 cases referred by the Public Assistance Committee were measured for surgical appliances. 3 cases of hernia were referred to their own doctors for admission to hospital for surgical treatment. 1 case of adenoma of the breast and 1 of papilloma of the breast were referred for operation, as were also 2 cases of lacerated cervix and 2 of uterine fibroids. 1 case of cancer of the uterus was referred to the Liverpool Hospital for Women for radium treatment. 1 case of infantile uterus and 1 of visceroptosis attended for examination and advice. 23 patients were found to be ante-natal and were transferred to ante-natal clinics and 3 cases of tuberculosis and 6 cases of venereal disease attended and were referred to their respective clinics.

At this clinic instruction in birth control methods is given when in the opinion of the medical officer in charge further pregnancy would be seriously detrimental to the health of the patient. 3 such cases received instruction during the year. 2 of these patients had very nearly lost their lives through nephritis in recent pregnancies and the third had advanced tuberculosis.

The services of the Council's Consultant Gynaecologist are available for patients attending this Clinic. During 1933, 14 patients were referred to him and in 7 of these operations were performed by him. The other patients who were referred for operation were admitted to one of the local hospitals under their contributory schemes.

SUNLIGHT CLINIC.—Two sessions are held weekly at the Artificial Sunlight Clinic and, during 1933, 131 children made 2,043 attendances for treatment. This clinic is an important adjunct in promoting healthier childhood and the cases treated have shown definite response to the effects of the mercury vapour lamp and the condition of the children has been materially improved. It cannot be stated too often, however, that exposure to these artificial sun rays is only part of the treatment and, unless attention is given by parents to carrying out the advice given regarding nutrition and general hygiene, satisfactory results cannot be obtained.

The largest number of children attending were rachitic children. There were 66 such children, of whom 45 were discharged much improved, 3 had to be admitted to hospital for special dietetic treatment, 13 ceased to attend owing to concurrent illnesses and 5 ceased to attend because of removal from the borough.

Debility and malnutrition was the reason for the attendance of 31 children and, of these, 18 were discharged cured, in 9 their condition was markedly improved, while 1 was referred to hospital and 3 ceased to attend owing to illness.

8 babies who were referred for treatment because of slow gain in weight responded very well to irradiation and 7 were discharged with very satisfactory gain in weight for their age. 1 case, however, did not attend long enough to obtain satisfactory benefit.

5 cases of marasmus were treated, of whom 2 were discharged cured and 1 improved under treatment, but the condition of the other two necessitated admission to hospital.

9 cases of anaemia responded well to treatment and, though 1 case of eczema did not improve with irradiation, 1 case of impetigo cleared up very quickly.

2 cases of bronchitis and 2 cases of pyloric spasm and isolated cases of ulcer on the chest wall, cervical adenitis, infantile paralysis and torticollis were all improved under treatment.

One case of infantile paralysis and one case of tubercular dactylitis were transferred to the Orthopaedic Clinic for further treatment, while one case of generalised tuberculosis which had been referred to the clinic for treatment was transferred immediately to hospital.

HOSPITAL ACCOMMODATION.—Hospital accommodation for maternity cases and for ailing and debilitated children is provided by the Council at their Maternity and Child Welfare Hospital, Cowley Hill. This hospital has 15 maternity and 22 children's beds and though only opened in May, 1931, its accommodation for maternity cases is already taxed to the fullest and it has been necessary on several occasions to utilise part of the children's accommodation for maternity cases. During the past few years the preference of mothers for confinement in hospital or nursing home has increased very considerably and appears to be still increasing. During 1931, the percentage of total (live and still) births registered in St. Helens that occurred in hospital or nursing home was 26.4%, in 1932 it was 29.2%, and in 1933, 29.5%. It is still increasing during the current year. Of the total registered births during 1933, 15.9% occurred in

the Council's Maternity Hospital, 10.9% at the St. Helens Hospital, 2.7% in midwives' private nursing homes, and 70.5% in the patients' own homes. The benefits derived from confinement in an institution are enormous. Apart from the additional safety resulting from the continuous presence of a trained medical and nursing staff and the aseptic conditions under which delivery in hospital can be carried out, the rest and the freedom from worry of household matters are of the greatest benefit to the mother, and appreciated by her enormously. At the Council's hospital, not once but many times, have the mothers stated that never again would they be confined at home.

On the maternity side of the Council's hospital, 408 cases were admitted during the year, which, with 11 cases remaining in the hospital from the previous year, brought the total number of cases dealt with during 1933 to 419. The number of cases delivered during the year was 336, of which 311 were delivered by the nursing staff and 25 by doctors. 10 of the deliveries were by Cesarean section and in 18 cases induction of labour was performed for various reasons. The average duration of stay of all cases was 11.4 days.

The majority of the cases are admitted by the hospital ambulance at the commencement of labour, but pregnant women suffering from such conditions as albuminuria, serious heart disease, etc., are admitted as occasion demands. During the year there were 25 admissions previous to labour for these reasons.

There were 4 maternal deaths in the hospital during the year, the causes of death being:

- 1. Myocarditis, post-partum shock, and dystocia due to uterine shock.
- 2. Endocarditis and influenza.
- 3. Eclampsia.
- 4. Acute uraemia due to chronic nephritis of small white kidney type.

Infant deaths numbered 38, of which 29 were still born. The causes of the other 9 infant deaths were:

Prematurity due to placenta praevia	3
Prematurity due to influenza in mother	1
Prematurity due to Cretinism in mother	1
Intra-cranial haemorrhage	4
-	
	9

On the children's side of the hospital 78 cases were dealt with during the year, including 19 cases which were remaining in hospital on the 1st January. Table 29 gives a summary of the children dealt with during the year, and Table 30 shows the reasons for admission.

TABLE 29.

General summary of the cases admitted to the Children's Wards of the St. Helens Maternity and Child Welfare Hospital during 1933.

Ist 1933	Number of Admissions during year	Average duration of stay in days	Number of Cases Discharged				Deaths			of Cases us Diseas	
9	59		No improvement.	Improved.	In Good health.	Transferred to other Hospitals		Measles.	Whooping Cough.	Epidemic Diarrhoea	Scarlet Fever.
78	8	110	2	6	47	*3	10	_			_

^{* 1} transferred to Royal Liverpool Children's Hospital.

Southport Convalescent Home.
Leasowe Open-Air Hospital for Children.

Table 30.

Table showing the reasons for admission of Children to the St. Helens Maternity and Child Welfare Hospital during 1933.

Reason of Admission										
Rickets					•••••	•••••	•••••	•••••	8	
Bronchitis	*****	•••••			•••••		*****		2 5	
Marasmus		•••••		•••••	•••••		••••		5	
Debility		•••••		•••••					17	
Malnutrition			•••••	•••••		•••••			12	
Tubercular Spi									1	
Tubercular per	itonit	is		******		•••••			2	
Gastro enteritis	3			•••••	•••••		*****		4	
Phlyctenular co	njuno	ctivi	tis		•••••					
Broncho pneun	nonia			• • • • • •			•••••		2	
Prematurity	•••••								2	
Hydrocephalus		•••••	•••••	•••••		•••••			1	
Paralysis follow									1	
Anaemia	•••••		••••						1	
								1	59	

consultant Services.—The services of a Consultant Obstetrician and Gynaecologist are available for any case in which special difficulty is experienced. He acts as Consultant Surgeon to the Council's Maternity Hospital and to all the Clinical and, under the Council's arrangements for the treatment of puerpera fever and puerperal pyrexia, his services are available to medical practitioners requiring specialist opinion in such cases.

The services of the Council's other consultant officers, e.g. the Ophthalmic Surgeon, the Throat and Nose Surgeon, and the Orthopaedic Surgeon, are also available and employed when required for any cases under the Maternity and Child Welfare Scheme.

MILK FOR MOTHERS AND INFANTS.—At all the clinics and centres full cream dried milk and chocolate milk are or sale at cost price or are available at less than cost price for necessitous cases. Cases in receipt of relief from the Public Assistance Committee are, when so requiring it, recommended to that Committee for the supply of extra nourishment.

During the year approximately 378 cwt. of milk were disposed of, and, of this, 66 lbs. were issued free and 40,504 lbs. at less than cost price.

Cod Liver Oil Emulsion, Malt and Oil, and Virol are also provided at the centres at cost price or free in suitable cases.

STERILE MATERNITY OUTFITS.—With the object of reducing the risk of puerperal sepsis in mothers confined at their own homes, sterile maternity outfits containing the necessary swabs, pads, etc., are available for issue at the low cost of 3/-. Though these outfits would be of the greatest value in making conditions for the confinement at home nearer to the standard of surgical cleanliness obtainable in hospital, very little use is made of this service, and only 9 outfits were sold during 1933. The chief reason appears to be the cost and the Committee will have to consider whether it would not be advisable to sell them at an even greater loss than at present.

MATERNITY BAGS.—Maternity Bags containing sheets, nightgowns, baby clothing, etc., were issued on loan to 20 cases during the year.

MINOR AILMENTS AND DENTAL DEFECTS.—During the year, 6 children received treatment for minor ailments, and 228 mothers and 144 children received dental treatment at the school clinic. Mothers in need of dentures are supplied with these at cost price.

CRIPPLED CHILDREN.—A complete record of the work of the Orthopaedic Clinic is given in Table 31 in the Orthopaedic section of the Report.

From that Table it will be seen that under the Maternity and Child Welfare Service 182 crippled children under 5 years of age were dealt with. This involved 208 attendances to see the orthopaedic surgeon, and 1,244 attendances for intermediate treatment. 11 cases were admitted to orthopaedic hospitals for operation or other surgical treatment. The cases dealt with comprised the following defects:—

Infantile paralysis		 •••••	20
Other forms of paralysis	s	 •••••	20
Rickets		 	49
Congenital deformities		 	17
Traumatism		 	8
Acquired foot deformiti	es	 	41
Arthritis, hip		 	2
Miscellaneous		 	25

INFANT LIFE PROTECTION.—The provisions of Part V of the Children and Young Persons Act, 1932, which came into operation on the 1st January, 1933, amended in various respects Part 1 of the Children Act, 1908, relative to the protection of children who are boarded out with foster parents for reward. The most important change is the extension of the age of the children affected from seven to nine years. The Act further requires that, except in case of emergency, notice must be given to the Local Authority before children are received.

Particulars are given in the following statement of the administration of the Acts in St. Helens during the year.

Number of persons on the Register who were receiving children for reward at 31/12/1933 14

Number of children—

 (a) On the Register at 1/1/1933 (b) Admitted to the Register during the year (c) Removed from the Register during the year— 	15 5
(i) Left the Borough 1 (ii) Legally adopted 1 (iii) Returned to relatives 4	
	6
(d) Who died during the yearno	one
(e) On the Register at 31/12/1933	14

The children were inspected regularly throughout the year by the health visitors and all were found to be well cared for and living under satisfactory conditions.

IX.—ORTHOPAEDICS.

The scheme for the prevention and treatment of crippling defects commenced in 1926 as a combined scheme of the tuberculosis, maternity and child welfare, and school medical services, remains in essential details as when first started. The cases are mainly discovered through the various health visiting and clinic services of these services, though frequently cases are referred by general medical practitioners either for consultation or for treatment. The Orthopaedic Surgeon sees the cases at the out-patient clinic at the Albion Street maternity and child welfare centre on the second and fourth Wednesdays of each month, and massage and remedial treatment are given daily by the orthopaedic nurse. In-patient treatment is provided at the Royal Liverpool Children's Hospital or the Leasowe Open-Air Hospital for Children. Tuberculous cases requiring less active

in-patient treatment are sometimes admitted to Eccleston Hall Sanatorium and rachitic cases requiring dietetic treatment are frequently admitted to the maternity and child welfare hospital.

The intermediate treatments by the orthopaedic nurse are mainly given at the Albion Street centre, though, owing to the difficulty in securing attendances from outlying districts, it has been found necessary for her to attend at the Elizabeth Street, Gartons Lane, and West Street maternity and child welfare centres once weekly. She also gives treatments once weekly at the Hamblett Open-Air Council School and visits Eccleston Hall Sanatorium as required.

A record of the work carried out is shown in Table 31.

As a centre for orthopaedics, the Albion Street Centre has become quite inadequate for the purpose. More commodious premises are required where proper remedial exercise classes could be held and a splint room and plaster room provided. These deficiencies could best be met if, as has been so often suggested, entirely new premises were provided to house all the health clinic services under one roof. By so doing, the orthopaedic clinic would benefit by having at its service, for example, the advantage of the X-ray plant and artificial sunlight installations of the Tuberculosis Dispensary.

The present orthopaedic scheme only deals with cases up to the age of 16 years. Tuberculous cases over that age revert to the care of the Tuberculosis Dispensary, and, though during the current year arrangements have been made for increasing the number of hospital beds available for such cases, there is at present no organised scheme for dealing with either these or other cripples after the age of 16 years. I would suggest that the orthopaedic scheme be ex-

ended now to include the older tuberculous cripple, and the question of provision for other cripples at the older ages could be considered a later date.

The provision of splints for all except tuberculous and hospital ases is undertaken by the St. Helens Invalid and Crippled Children's id Society. This Society also does most excellent after-care work and is invaluable in arranging for extra nourishment, holidays, etc.

I am indebted to Mr. Bryan McFarland, the orthopaedic gurgeon, for the following report on the working of the scheme uring the past eight years.

"For eight years there has been an orthopaedic scheme in St. Helens. It is perhaps as well to explain what is meant by 'orthopaedic'. Although originally orthopaedic surgery dealt only with the correction of deformities in children, it has come to mean the surgery of the locomotive system. It has a wider scope than merely the correction of deformities and is concerned with the prevention of any defect in the proper use of the limbs and spine. These defects and deformities arise from various causes. They may be due to conditions operating before or during birth, so that a child is born with a defect or a deformity. The greater part of these defects can be cured, and most easily, if the child is brought under the care of the orthopaedic surgeon at a very early age. Later in life one of the most prevalent causes of crippling is infantile paralysis. name implies, this disease is a paralysis occurring during infancy. It starts as a fever; it is infectious; the actual paralysis is often at first widespread; and unless treatment is early and adequate permanent crippling results. The paralysis is always exaggerated by faulty posture or misguided treatment. value of the St. Helens scheme in this connection was very strongly brought out in the recent epidemic. Owing to the presence of the orthopaedic nurse at the clinic, it was not necessary

treatment could be started at the clinic. It was perfectly amazing to see the results which were obtained. Children with whole limbs paralysed eventually recovered completely. Quite apart from the human aspect, this has an economic application in saving the town from buying splints and apparatus for years and in producing a happy self-supporting citizen.

It would be possible to multiply indefinitely these examples of the beneficial effects of the scheme. Rickets, if detected early and given adequate treatment, can be cured without the occurrence of deformity. Here again is a vast saving to the town.

Cases of tuberculosis of one of the bones or joints requiring hospital treatment are admitted to the Leasowe Open-Air Hospital for Children, where the disease is arrested and convalescence is commenced. On discharge the child attends the clinic regularly under the orthopaedic nurse and is also seen at regular intervals by the orthopaedic surgeon. He sees that no deformity occurs, that there is no recurrence of the disease, and that the child is handicapped as little as possible in view of the disease from which it has suffered.

If a case of some obscurity presents itself, the child can be admitted to the Myrtle Street Branch of the Royal Liverpool Children's Hospital, where investigations and tests can be carried out by the orthopaedic surgeon or with the collaboration of other specialists. This introduces a most important point in the St. Helens scheme. The orthopaedic surgeon who sees the cases at the clinic is the same surgeon who operates on them in hospital. He controls their in-patient treatment and he lays down the lines on which they must be cared for after their discharge.

After-care is a most important activity of the orthopaedic clinic. It is not a question only of giving massage or fitting splints, it entails seeing that the cases carry out instructions designed to continue and augment their active in-patient treatment. It will be clear how important it is that the surgeon who operates should design and control the after-care, so that from the minute the child presents itself at the clinic, whether it be a fracture, a child with rickets, or a child with curvature of the spine or tuberculous disease of the hip, that child is under the care of one surgeon until it is discharged cured, not from the hospital only but after years of supervision in the clinic. The importance of this continuity of policy and personal care cannot be exaggerated.

Important as the work of the orthopaedic nurse and surgeon may be, their efforts would be fruitless but for the loyal, willing and untiring assistance rendered by the Crippled Children's Aid Society. The work of these assistants in seeing that instructions are carried out, in helping with splints, and in generally assisting the cripple in his or her efforts to overcome their disability, cannot be too highly praised."

Table 31.

Record of work under Orthopaedic Scheme during the year 1933.

	Cases of Tuberculosis	Maternity and Child Welfare Cases	Non- tubercular School Children
Number of Cases dealt with during the year	52	182	432
Number who ceased to attend or attended for Consultation only	5	27	56
Number Discharged Cured or Improved	4	39	67
Died	1	1	
Cases transferred to Education Account	3	43	
Cases transferred to Tuberculosis Account	_		2
Number of Cases remaining under Treatment at end of 1932	42	115	309
Attendances to see Orthopaedic Surgeon	84	208	403
Attendances for intermediate treatment	318	1244	3462
Visits to Homes by Orthopaedic Nurse	97	35	357
Cases treated in Royal Liverpool Children's Hospital:—Myrtle Street Heswall		9 2	12 14
Cases treated in Leasowe Open-Air Hospital for Children	12		
Cases treated in David Lewis' Northern Hospital	_	_	2
Cases treated in Liverpool Royal Infirmary	_		_
Cases treated in Eccleston Hall Sanatorium	6	_	
Total number of days of Institutional Treat-	4110	367	1668

X.—WELFARE OF THE BLIND.

There were 191 Blind Persons on the Blind Register for St. Helens on the 1st January, 1933, and this number increased by 8 to 199 during the year. The following is an analysis of the cases on the register at the 31st December, 1933.

Age distribution :-

Age	05	years		 	
	5—16	, ,		 	10
	16—21	,,		 	12
	21—50	,,		 	61
	50—70	,,		 	55
	70	, ,	•••••	 	61
		r	Γotal	 *****	199

Educational and occupational distribution:—

Infant								
Education	At Sc	hool					•••••	11
	Not a	t school	l			•••••		
					**	*** 1		
Employme	nt—Emp	oloyed (Works	shops of	r Home	e Work	ers	
S	cheme)							25
Emplo	oyed (Wo	orking o	n own	accour	nt)			8
Under	Trainin	g					*****	10
Not tr	aining b	ut train	able					1
Unem	ployable			,				144

All provision for the care and welfare of the local blind—with the exception of that of blind children under two years of age, and the education of children of school age and vocational training—is undertaken on behalf of the Corporation by the St. Helens and District Society for the Welfare of the Blind.

It is very satisfactory to note that all children of school ages are at school, all but one of those trainable are undergoing occupational training, and all employable are in employment.

The treatment of persons suffering from disease of, or injury to the eye, and the provision of suitable glasses as a preventative of blindness is undertaken by the Council under Section 66 of the Public Health Act, 1925.

XI.—LOCAL GOVERNMENT ACT, 1929.

The administrative arrangements under the Local Government Act, 1929, were described in my Report for 1930 and remain unchanged.

Table 32 shows the number of persons in receipt of institutional relief on medical grounds on the 1st January, 1934.

Table 32.

Persons in receipt of Institutional Poor Relief on account of sickness, or bodily or mental infirmity, and rate aided persons in mental hospitals on the night of the 1st January, 1934.

	Establishments in which persons were relieved.	Men	Women	Children between 3 and 16 years of age	Infants under 3 years of age	Total
(A)	In Poor Law Establishments:— Whiston Infirmary: (a) Sick wards (b) Persons suffering from mental infirmity and certified under the Lunacy Acts or the Mental Deficiency Acts	68	35 56	10	3	116
	Swinton Homes for Mental cases		-	2	_	2
(B).	the Poor Law Acts:— (a) Establishments for persons suffering from mental infirmity, excluding persons maintained under the Lunacy and Mental Treatment Acts, 1890					
	to 1930, in Mental Hospitals :— Royal Albert Institution,	3		_		3
	(b) Other Establishments for the Sick— Maghull Home for Epileptics St. John's Institution for Deaf and	2	4			6
	Dumb, Boston Spa David Lewis Epileptic Colony,	_	1	_		1
	Manchester	1				1
(C).		_	1			ĺ
	the Lunacy and Mental Treatment Acts:— Rate aided persons	110	111			221
	Totals	237	209	12	3	461

XII.—LIST OF ADOPTIVE AND LOCAL ACTS, BYELAWS, AND LOCAL REGULATIONS AND ORDERS relating to the public health, in force in the district.

ADOPTIVE ACTS.

The Infectious Disease (Notification) Act, 1889, applied to:

- (1) Ophthalmia Neonatorum, by Order of the Local Government Board, which came into force on the 7th April, 1910.
- (2) Acute Poliomyelitis and Cerebro Spinal Fever, by Order of the Local Government Board, which came into force on the 19th February, 1912.
- The Infectious Disease (Prevention) Act, 1890. Adopted 7th January, 1891.
- The Public Health Acts Amendment Act, 1890. Parts II and IIII adopted 1st April, 1891. Part IV adopted 1st July, 1923. Part V adopted 24th October, 1894.
- Public Health Acts Amendment Act, 1907, Sections 78, 79, 80, 81, 85, 88, 89 and 90, put in force 1st January, 1909. Sections 19, 25, 26, 27, 29, 32, 33, 34, 35, 36, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 66, 67, 68, 93, and 95, and Part V, put in force 23rd August, 1909.
- The Public Health Act, 1925, Part II, Sections 13, 14, 15, 16, 20, 23, 25, 26, 27, 28, 30, 31, 32, and 35; Parts III, IV, and V, adopted 7th December, 1927, put in force on 1st February, 1928.

LOCAL ACTS with Sanitary Clauses.

- The St. Helens Improvement Act, 1869.
- The St. Helens Corporation Act, 1893.
- The St. Helens Corporation Act, 1898.
- The St. Helens Corporation Act, 1911.
- The St. Helens Corporation Act, 1921.
- The St. Helens Corporation Act, 1933.

ADAPTATION OF LOCAL ACTS.

- The Borough of St. Helens (Adaptation of Local Acts) Order, 1930, made by the Minister of Health, for bringing certain provisions of the local Acts into conformity with the provisions of the Public Health Act, 1925.
- The Ministry of Health Provisional Orders Confirmation (St. Helens and York) Act, 1931; confirming the St. Helens Order, 1931 as to Tuberculosis.
- The Ministry of Health Provisional Orders Confirmation (No. 1) Act, 1928, repealing and altering certain sections of the St. Helens Improvement Act, 1869, and the St. Helens Corporation Acts, 1893, 1898, 1911, and 1921 with reference to New Streets and Buildings.

BYELAWS.

- Byelaws as to Nuisances, confirmed by the Home Office, 11th May, 1870.
- Byelaws with respect to Nuisances made by the Council on the 1st October, 1930.
- Byelaws as to Slaughterhouses, made by the Council on the 5th February, 1930.

- Byelaws with respect to New Streets and Buildings in the Borough of St. Helens, made by the Council on the 5th October, 1927.
- Byelaws with respect to the Drainage of Existing Buildings in the Borough of St. Helens made by the Council on 7th December, 1927.
- Byelaws with respect to Tents, Vans, Sheds and similar Structures, used for human habitation made by the Council on the 28th July, 1926.
- Byelaws with respect to Common Lodging Houses, made by the Council on the 2nd May, 1894.
- Byelaws with respect to Houses let in Lodgings, made by the Council on the 2nd May, 1894.
- Byelaws with respect to Female Domestic Servants' Registries, made by the Council on the 1st December, 1909.
- Byelaws with respect to the Supply of Water, made by the Council on the 6th June, 1900.
- Byelaws with respect to Cisterns, Waterclosets and Urinals, made by the Council on the 1st February, 1922.
- Byelaws as to Spitting, made on the 2nd August, 1911.

REGULATIONS.

- Regulations as to Public Abattoir and Cold Air Stores, made by the Council on the 2nd May, 1906.
- The Borough of St. Helens (Notification of Measles, German Measles and Whooping Cough) Regulations, 1915, made by the Minister of Health on the 22nd June, 1915.

ORDERS—SHOP ACTS.

General Weekly Half-Holiday Order, made on the 7th August, 1912.

Weekly Half-Holiday Extension Order (Butchers and Chemists) made on the 4th December, 1912.

Closing Order (Motor, Cycle and Aircraft dealers) confirmed by the Home Secretary on the 30th January, 1913.

Closing Order (Tailors, etc. Shops) confirmed by the Home Secretary on the 10th December, 1915.

XIII.—INSPECTION AND SUPERVISION OF FOOD.

MEAT AND OTHER FOODS.—There is a municipal abattoir with cold store attached. The present premises were built in 1895 and, though additions and alterations have been made since, further improvements are necessary to bring them up to date. One of the most important alterations required is the reconstruction and enlargement of the pig slaughtering hall which should be so designed that the pig after stunning is hoisted and then travels along a bleeding rail to the scalding tank and thence to the dressing rail. The killing and dressing rooms should also be separate from each other.

On the cattle and sheep side there is great need for proper storage accommodation for hides and for fodder. Further, for more efficient supervision of the meat supply there should be a special room for the temporary detention of suspected meat and better provision for the isolation of condemned meat. As the present tendency is towards the establishment of centralised slaughterhouses, it is possible that in the near future St. Helens would provide accom-

modation for slaughtering for an area considerably larger than the borough itself. If such centralisation should take place it is essentially that the St. Helens Abattoir be modernised and I would suggest, therefore, that the Committee consider at an early date the desirability of carrying out the improvements indicated.

An improvement carried out during the current year which will vastly improve the sanitary conditions at the Abattoir is the abolition of the old open middenstead. The manurial refuse is now collected in closed containers which when full are removed on an under-carriage by the contractor and replaced by similar empty containers. By this method there is no disturbance of the manure at the Abattoir after it has been placed in the container and, as the containers are kept closed, nuisance from flies is obviated.

The butchers using the Abattoir employ their own slaughtermen and up to the end of 1933 these were licensed yearly by the Corporation. With the passing of the Slaughter of Animals Act, 1933, which came into force on 1st January, 1934, all slaughtermen in slaughterhouses and knackers' yards must now be licensed and licenses granted are available throughout England and Wales during the period for which they are issued. The St. Helens Council decided to limit the licenses granted to one year and have granted licenses under this Act to 23 slaughtermen employed at the Abattoir and to 3 slaughtermen employed in a private slaughterhouse.

A further provision of the Act of 1933 requires that animals in slaughterhouses and knackers' yards are to be stunned before slaughter by a mechanically operated instrument. This requirement does not apply to sheep unless the Local Authority apply it by resolution. This it is proposed to do, so as to bring procedure under the Act into agreement with the local byelaws under which stunning of all animals (including sheep) by mechanically operated instruments has been compulsory since February, 1930. At present captive bolt pistols are used but with the modernising of the Abattoir already

referred to I would suggest the installation of electrical methods of stunning. Though a recent development, this method has, so far as the stunning of pigs and sheep is concerned, passed the experimental stage and is coming into more general use. It is easy to manipulate and cheap to use, and I am informed that the appearance and keeping quality of the meat are considerably improved.

In addition to the Abattoir there is only one private slaughternouse in the borough. This is licenced for the slaughter of pigs only and the licence comes up for review yearly. During the year, visits for inspection purposes were made and no infringements of the Byelaws with respect to Slaughterhouses or of the Public Health (Meat) Regulations, 1924, were found.

Table 33 shows the number of animals slaughtered and the approximate weight in pounds of meat found diseased.

Table 33.

Number of Animals slaughtered and amount of diseased meat condemned during the year, 1933.

							Priv	ATE	
		 Аватт	COIR.				SLAUGHTE	ERHOUSES.	
		Number		Animals diseased	Weight in lbs.	Number of		Animals liseased	Weight in lbs.
		Animals Slaugh- tered.	Tuber- culosis	Other diseases.	of Meat Con-		Tuber-culosis	Other diseases.	of Meat Con-
Beasts Calves Sheep Pigs	•••••	 3874 214 1343 4904	462 152	977 3 12 253	82245 113 43 6766	 2221	_ _ 166	_ _ _ 102	 2993

The inspection and supervision of all meat at the Abattoir is carried out by the Superintendent who is a qualified meat inspector. The inspection and supervision of all other food in the borough and

of the premises in which it is prepared or sold is undertaken by specialist Food Inspector.

As mentioned in my Report of last year the St. Helens Corporation Act, 1933, has strengthened the powers of control and supervision of food supplies. Under this Act all premises used for the preparation or manufacture of potted, pressed, pickled or preserved meat, fish or other food intended for purposes of sale must be registered with the Corporation. By such registration these premises can be kept under better supervision. It was not found possible to carry out the registration during 1933 but this is being proceeded with during the current year.

Further powers obtained under the 1933 Act are (a) power to make byelaws in regard to transport or exposure of food for sales and (b) the registration of storage accommodation used by hawkers of meat. No byelaws have yet been made but steps are being taker during the current year to secure the registration required by mean hawkers.

During 1933, 3,826 visits were made by Inspectors to shops stalls and vehicles and places where food is prepared or stored, as compared with 3,376 during 1932. The following is a brief summary of the work covered by these visits. Further details are given in the appropriate sections of the Report:—

Premises.	Visits	No. of offences against Acts, Orders &c.	No. of nuisances or defects found	No. of nuisances or defects remedied after service of notice:
Private Slaughter-houses Fried Fish shops Eishmongers and Greengrocers Butchers shops Ice Cream shops Eakehouses Tripe Boilers Food Preparing and Storing Places	237 118 905 1191 190 303 191 686	- 41 30 - - -	- 4 2 11 31 - 2	- 4 2 11 31 - 2

The following are the quantities of various classes of foodstuffs which were condemned during the year owing to being diseased or unsound:—

Meat						 92,160 lbs.
Fish	••••	•••••			••••	 753 ,,
Poult	ry, Ga	me and	d Rabb	its		 8 ,,
Danis	sh May	VS	••••			 168 ,,

Sale of Food Order, 1921—Labelling of Imported Meat—Though this Order requires all imported meat exposed for sale to be definitely marked "imported" and though repeated prosecutions have been taken by the Department in past years for offences against othe Order, instances are still repeatedly found where the Order is leither ignored or not properly complied with. This is a serious fraud on the public. The average housewife is not competent to distinguish the between imported and home killed meat and where the imported emeat is not marked may easily buy imported under the impression that she is buying home killed meat.

During 1933 it was found necessary to institute legal proceedings in five instances and fines ranging from 10/- to £5 were imposed.

Public Health (Meat) Regulations, 1924.—Eleven offences against these Regulations were found during the year. The offences consisted of:—

		No. of
		Offences
1.	Failure to protect meat from contamination by street dust	 5
2.	Premises not kept in a cleanly condition	 1

		No. of
		Offences
3.	Unsuitable premises used for the storage of meat	1
4.	Unsuitable receptacle for the storage of trimmings and refuse	2
5.	Sanitary convenience communicating directly with room where food is stored or prepared for sale	1
6.	Room not adequately ventilated	1

Though some offences may be due to ignorance or even to some slackness on the vendor's part, no excuse should avail for the person who keeps his premises in a filthy condition or allows his meat to be covered with a distinct film of street dust—frequently manurial in composition.

Legal proceedings were taken in one instance of failure to protect meat from contamination and a fine of £2 was imposed. The remaining offences were dealt with by verbal and written warnings.

Agricultural Produce (Grading and Marking) Act, 1928.—More use is now being made in St. Helens than formerly of the special trade designations allowed by the above Act defining the quality of agricultural produce, but there is still considerable scope for improvement in this direction.

There are no premises registered for the cold or chemical storage of eggs.

Merchandise Marks Act, 1926.—The Orders which have so far been made under the Merchandise Marks Act, 1926, in regard to foodstuffs are:—

Order.

Relating to

The Merchandise Marks (Imported Goods) No. 3 Order, 1928

Honey. Fresh Apples.

The Merchandise Marks (Imported Goods) No. 5 Order, 1928

Currants, Sultanas, Raisins.
Eggs in Shell.
Dried Eggs.
Oat Products.

The Merchandise Marks (Imported Goods) No. 4 Order, 1929

Raw Tomatoes.

The Merchandise Marks (Imported Goods) No. 5 Order, 1930

Malt products, namely Malt Extract, Malt Flour, Malt Extract and Cod Liver Oil and Malt Extract blended with any other product so that Malt Extract comprises more than 50 per cent by volume of the whole.

The Merchandise Marks (Imported Goods) No. 8 Order, 1931

Imported frozen or chilled salmon or imported frozen or chilled sea trout or any imported salmon or sea trout which has been subjected to any process of freezing or chilling prior to importation.

The Merchandise Marks (Imported Goods) No. 1 Order, 1932 Butter.

These Orders require that any classes of foodstuffs to which they relate shall on importation, on exposure for sale, and when sold in quantities exceeding 14 lbs. in weight, be clearly marked with an indication of origin.

Owing to the number of prosecutions in previous years, these Orders are now being more generally complied with, and in no instance was it necessary to institute legal proceedings. In two instances warnings were given by the Committee.

MILK SUPPLY.—At the close of the year there were registered under the Milk and Dairies (Amendment) Act, 1922, and the Milk and Dairies Order, 1926:—

- 8 persons as cowkeepers and wholesale and retail purveyors of milk;
- 2 persons as cowkeepers and wholesale purveyors of milk;
- 7 persons as cowkeepers and retail purveyors of milk;
- 370 persons as purveyors of milk; and
 - 80 premises as cowsheds or dairies.

A total of 966 inspections was paid by the sanitary inspectors to the cowsheds, dairies and milkshops during the year. Approximately 200 cows are kept for dairy purposes within the borough, and these were regularly inspected by the veterinary inspector.

Despite the very satisfactory progress made in clean milk production since the first Clean Milk Competition in St. Helens, it was decided to hold a further competition in 1933. It was considered that though many of the older competitors are now well versed in the methods of clean milk production, the competitions are still of value in maintaining interest and enthusiasm and in encouraging

the more backward producers to attain a higher degree of efficiency. Further, it is anticipated that in the near future a National Scheme of Accredited Milk Producers will be inaugurated. Under such a scheme certain standards of cleanliness would be laid down and producers reaching that standard would get increased prices for their milk. If a scheme on these lines did come into effect the Clean Milk Competitions held in St. Helens will have been of great value in enabling local producers to conform to the requirements without difficulty.

The third competition as in previous years was limited to producers of non-graded milk and, as in the previous year, was also open to producers in areas adjoining St. Helens who were retailing milk in the borough. In 1933, 10 producers in the borough and 6 in the Lancashire County Area entered the competition, but two of the borough competitors subsequently ceased milk production and retired.

The following is an excerpt from the judge's report on the competition:

"On the whole the farms visited gave every evidence of a sound inculcation of the principles of clean milk production and a slow but sure improvement in applied technique. This in a number of cases was very pronounced in comparison with my visits of two years ago.

One of the worst features noticed was the water supply. To produce clean milk it is imperative that an ample supply be available at all times. The high temperature of the water varying from 60° F to 68° F was more likely to induce souring than proper cooling of the milk."

This inability to cool milk adequately during the summer months is a serious difficulty with which local milk producers have to contend, and to this fact must be attributed the comparatively high bacterial counts of a number of the competitors during the abnormally hot weather experienced during the period of the competition.

Arrangements were again made during 1933 for the Lancashire County Agricultural Staff to carry out advisory work in St. Helens in connection with milk production. These services include periodic visits to all milk producers in the borough, and the giving of advice not only in clean milk production but also in the feeding and general care of the cow.

Milk (Special Designations) Order 1923.—The following licences were granted during the year under the Milk (Special Designations) Order, 1923:—

Only one infringement of the Regulations came to notice. This was a case in which a firm holding a pasteuriser's licence in another area to sell milk as pasteurised were selling milk under this designation in St. Helens without having the necessary supplementary licence. The offender was warned by the Committee.

Milk and Dairies (Consolidation) Act, 1915.—In two instances vendors were discovered selling milk on the highway from vehicles not marked with their name and address in accordance with section 6 of the Act. In one case legal proceedings were instituted and a fine of 5/- imposed, and in the other case the vendor was warned by the Committee.

Milk and Dairies Order, 1926.—Comparatively few infringements of the Milk and Dairies Order, 1926, were found during the year. Owing to the educational activities of the department in recent years, there is no doubt that milk producers and dairymen in St. Helens now realise that the unsatisfactory methods of production and distribution which have been general in the past have not only retarded any increase in the consumption of liquid milk, but have also resulted in serious losses to the trade.

Though the present standard of production and distribution can now be regarded as very satisfactory there is still room for improvement in some respects.

While many milk producers now use the covered type of milking pail there are others who still cling to the old-fashioned form of open container, and the reluctance of many producers to the clipping of cows has not been entirely overcome. It is impossible to emphasise too strongly the improvement in the cleanliness and keeping quality of milk which has been effected when these improvements have been adopted.

Most of the dairies and dairyfarms in the town are now provided with some form of sterilising equipment, varying from the simple but efficient improvised copper-steamer to the more elaborate

sterilisers supplied by firms specialising in dairy outfits. A number of dairymen, however, do not yet realise the importance of first rinsing the milk vessels with cold water in order to prevent that coagulation of the milk albumin on the sides of the vessel which renders subsequent sterilisation less effective.

Owing to the high temperature of the St. Helens water-supply during the summer months a number of farmers and dairymen have installed some form of artificial cooling plant. The value of this method of cooling is beyond question, but until some less expensive form of artificial cooler can be devised, the installation of this type of equipment is not practicable for the smaller trader.

It is pleasing to note that the proportion of milk distributed in bottles during the past year has increased very considerably.

This is undoubtedly the ideal method, but with this form of distribution the question of efficient sterilisation becomes increasingly important, as milk bottles returned from a house in which infectious disease exists and which have been imperfectly sterilised might lead to the spread of infection.

Bacteriological Examination of Milk.—In the routine examination of milk supplies 84 samples were sent for examination for the presence of tubercle bacilli by guinea pig inoculation tests. In addition, a further 9 samples taken in suspected cases or in following-up previous samples were examined. Dealing only with

the 84 routine samples and deducting from them 2 samples in respect of which the guinea pigs died too soon for a definite diagnosis to be made, positive evidence of tubercle bacilli was found in 9 samples (11.0%). This is slightly lower than the corresponding percentage for the previous year (11.8%) but higher than the average throughout England and Wales (approximately 7%).

Table 34 shows the percentages of infected samples and the areas of production of the samples examined during the past four years.

Like all other towns, a very considerable proportion of the milk consumed in St. Helens is produced in other areas, so that St. Helens is very largely dependent on these areas for the freedom or otherwise of its milk supply from tubercle infection. Therefore, unless all areas insist on frequent periodic veterinary inspection of all dairy cattle in conjunction with systematic bacteriological examination of milk samples, there is little hope for any material reduction in tubercle infected milk. Further, the sample of pasteurised milk which proved positive last year shows the danger of always accepting pasteurised milk as safe.

In addition to examination for tubercle bacilli, 33 samples of milk were examined during the year for bacterial count and the presence of bacillus coli. This examination is a measure of the cleanliness or otherwise of the milk production, the presence of bacillus coli indicating particularly manurial contamination. The results of these examinations are shown in Table 35.

TABLE 34.

Tubercle Bacilli in Milk. Areas of production of samples examined.

Samples shewing positive vidence of tubercle bacilli Aumber	18.1% 16.0% 14.3%	15.6%	0.0% 4.3% 1.6%	2.2%	7.4% 21.4% 8.8% 0.0%	11.8%	6.7% 18.2% 3.6% 16.6%	/0.11
Samples shevidence of Number	244	01		2	33	=	1 6	6
No. of samples in respect of which a definite diagnosis was made	11 25 28 —	64	23 64	16	27 28 34 4	93	15 33 28 6	82
No. of samples in respect of which the guinea pig died too soon for a definite diagnosis to be made	2 1	3					2	2
No. of routine samples examined	13 26 28 —	29	24 64 —	92	27 29 34 4	94	15 33 30 6	84
Year	1930		1931		1932		1933	
Area	St. Helens. Lancashire C. C. Cheshire C.C. * Pasteurised	Total	St. Helens	Total	St. Helens Lancashire C.C. Cheshire C.C. * Pasteurised	Total	St. Helens Lancashire C.C. Cheshire C.C. * Pasteurised	Total

* As the pasteurised milk was mixed milk from several areas the area of production of the samples examined was unknown.

TABLE 35.

Bacterial Counts in Samples of Graded and Ungraded Milks.

-		• 1			
		1 10,000 c.c. 100,000 c.c.	-	1	
li.		1 10,000 c.c.	1	-	1
Presence or absence of colon bacilli	Present in	1,000 c.c.		1	1
absence o	Pr	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	4	3
sence or			-	2	l
Pre	-	1 c.c.	9		
	A1.	Absent in I c.c.	5	4	_
		Over 200,000	_	1	1
No. of bacteria per c.c.	100 000	100,000 to 200,000	I		I
No. of bact	20.000	20,000 to 100,000	4	2	2
		Under 30,000	10	12	7
		Grade	Pasteurised	Grade A.	Ungraded and Untreated
		No. of Samples	15	4	4

Under the Milk (Special Designations) Order, 1923, Grade A milk must not contain more than 200,000 bacteria per c.c. and colon bacilli must be absent in 1/100 c.c. Pasteurised milk must not contain more than 100,000 bacteria per c.c. There is no bacterial standard for ungraded milk.

FOOD AND DRUGS (ADULTERATION) ACT, 1928, etc.—Food and Drugs (Adulteration) Act, 1928.—During the year, 331 formal samples and 92 informal samples were taken for analysis.

The natures of the samples taken, with the results of examination by the Public Analyst, are shown in Table 36.

Table 36.

Number of samples taken under the Food and Drugs (Adulteration)
Act, 1928, during 1933, and results of analysis by the Public Analyst.

ARTICLE		ber of s Taken	Number Genuine		Number Adulterated	
ARTICLE	Formal	Informal	Formal	Informal	Formal	Informal
Arrowroot Bicarbonate of Soda Candied Peel	1 1 2 2 3 1 3 3 4 2 1 1 4 10 8 5 2 11 2 11 2 183 1 5	- - - - - - - - - - - - - - - - - - -	1 1 2 2 3 1 3 4 2 1 1 4 10 7 5 2 11 2 176 1 5		- - - - - - - - - - - - - - - - - - -	
and Fish &c.— Lobster Paste Lunch Tongue Ox Tongue Loaf Potted Beef and Ham Potted Salmon Tinned Lunch Tongue Tinned Pilchards Tinned Sild Veal and Ham Paste					 	

TABLE 36.—Continued

ARTICLE	Number of Samples Taken		Number Genuine		Number Adulterated	
AKTICLL	Formal	Informal	Formal	Informal	Formal	Informal
Raspberry Table Jelly	1 5	_	1 5			
Sausages, &c.— Beef Sausage Pork Sausage	4	_	3 4		_	_ _
Polony Sweets— Buttered Brazils		1	_	1	_	_
Everton Toffee	1		1			
Honey & Butter Toffee	1	_			1	
Kendal Mint Sweets Malt & Butter Fingers	1	2		$\frac{}{2}$	1	
Mixed Sweets	1		1			
Royal Mixtures			i		_	
Sago	i		j		—	_
Scotch Whisky	2		1	_	1	
Self-Raising Flour	4	_	4		—	_
Sugar	4	_	4		—	—
Sultanas]		!			
Sweet Sage Herb	Į.			_		
Tea	2		4	_	<u> </u>	
Tripe	2	_	2	_		_
Λ	1		1			
Golden Plums	1		i			
Green Peas	1		i		_	
Peaches	1		1	_		_
Pears	2		2			
Pineapple Cubes	4	_	4	—		
Red Cherries	1		1			
Tomatoes	. 3	_	3		_	
Total	331	92	320	88	11	4

The appended statement shows the action taken in the case of adulterated samples taken formally:—

(a) Legal proceedings instituted under the Food and Drugs (Adulteration) Act, 1928.

170

New Milk

Sample		
No.	Article.	Adulteration and Result of Proceedings.
246	Malt Vinegar	Consisted entirely of Artificial Vinegar. Fined 10/- and costs.
272	New Milk	10% deficient in milk fat. Fined £1 and costs.
373	Malt and Butter Fingers.	Contained only 0.44% of fat. The quantity of fat present did not justify the designation "Malt and Butter Fingers." Fined £1 and costs.
374	Honey and Butter Toffee.	Contained 0.54% of fat other than Butter Fat. The quantity and nature of the fat present did not justify the designation "Honey and Butter Toffee."
387	Scotch Whisky	Fined £1 and costs. Contained 6% added water. Fined 10/- and costs.
(,	ceedings instituted, but in all cases the rned by the Committee.
	nple No. Article.	Adulteration.
	Title.	Addition.
1	New Mill	2% deficient in milk fat.
1	New Mill	4% deficient in milk fat.
1	New Mill	2% deficient in milk fat.

1% deficient in milk fat.

Examination of Milk for Dirt.—One sample of milk was specially examined for dirt and was found to contain 2.5 parts by volume of dirt per 100,000 parts of milk. The dirt consisted of ordinary dust and contained no cow dung.

The Public Health (Condensed Milk) Regulations, 1923 and 1927.—No infringements of these Regulations were found during the year.

The Public Health (Dried Milk) Regulations, 1923 and 1927.—No infringements of these Regulations were found during 1933.

Artificial Cream Act, 1929.—No premises are registered under this Act in St. Helens and no infringements were found during the year.

Ice Cream Premises.—Further powers for controlling these premises have now been obtained by Sections 133 and 134 of the St. Helens Corporation Act, 1933. These sections not only make it compulsory that manufacturers and vendors of ice cream and premises used by them must be registered with the Local Authority, but give the Local Authority power to refuse registration and to cancel registration. This marks a great improvement in the control of ice cream.

A survey of these premises has been undertaken recently and t was found that in many instances ice cream was being made under conditions which could not be regarded as satisfactory. In a number of cases the manufacture of the ice cream and the cleansing of the utensils was being carried out in sculleries or other parts of domestic premises. From the public health point of view, there is serious risk

of contamination where this practice obtains, and I am of opinion that no processes connected with the manufacture or sale of ice cream should be allowed in any premises also used for household purposes. It is cream is a product in which milk is an important constituent, and for that reason is very liable to contamination and the conveyance of infection. The same standard should, therefore, be insisted upon in the case of ice cream premises as is required in the case of dairies.

Public Health (Preservatives in Food) Regulations.—All samples of foodstuffs submitted for analysis under the Food and Drugs (Adulteration) Act, 1928, are also examined for the presence of preservatives.

No infringement of these regulations was found during the year.

Fertilisers and Feeding Stuffs Act, 1926.—11 informal samples of fertilisers and feeding stuffs were taken under the above Act, during 1933, and were all found to be genuine.

No infringements of the Act in respect of labelling were found during the year.

Poisons and Pharmacy Act, 1908.—Two licences were again renewed during the year under Section 2 (1) of the Poisons and Pharmacy Act, 1908, for the sale of poisonous substances for use exclusively in agriculture and horticulture.

No infringements of this Act were found during the year.

BAKEHOUSES.—There are 88 bakehouses on the Register one of which is underground. Mechanical power is used in 32 instances.

308 visits of inspection were made during the year and 31 sanitary defects were found and remedied after notice being given.

DISEASES OF ANIMALS ACTS.—Tuberculosis Order, 1925.—During the year 5 notifications were received under the Tuberculosis Order, 1925, of cattle within the borough suspected to be suffering from tuberculosis. Of these, 3 were discovered by the Council's Veterinary Inspector and 2 were discovered as a result of the routine bacteriological examination of milk in St. Helens. In one instance the animal died before it could be slaughtered, and, in the other 4, slaughter was carried out by the Council at the Public Abattoir and evidence of tuberculosis was found on post-mortem examination.

The total compensation paid to the owners of the animals was £12/10/0 and the net amount of salvage recovered by the Corporation from the sale of hides, etc. was £3/8/9. In one instance, in addition to the compensation paid to the owner, the Corporation also paid to him the sum of 16/1, which was the amount by which the proceeds of the salvage of the carcase had exceeded the ordinary amount of compensation.

Particulars relative to the animals slaughtered, the form of the suspected disease, and the classification of the stage of the disease as revealed at the post-mortem examination, are given in the following summary:—

	Description	Form of Suspected Disease.	Classification of the disease at post-mortem examination.
	Cow in Milk	Tuberculosis with chronic cough. Giving tuberculous milk	Not advanced. Advanced.
•	do. do.	Tuberculosis with chronic cough.	do. do.

Anthrax.—No case of Anthrax was reported during the year.

Swine Fever.—24 cases of suspected Swine Fever were reported during the year. In no instance was the disease confirmed by the Ministry of Agriculture.

XIV.—SANITARY CIRCUMSTANCES OF THE AREA.

WATER.—The water supply is from deep wells and boreholes in new red sandstone at Eccleston Hill, Whiston, Knowsley, Kirby, and Melling, supplemented by a supply from the Liverpool Corporation Rivington Main, and water from coal measures at Collins Green.

The water is of a high degree of purity, though hard. The total hardness is reduced from 22.6 degrees to 10.5 by a softening process before distribution.

The new pumping station in Sutton Road for dealing with the water from Collins Green was opened in September and, as well as providing an additional source of supply, has also been a means of improving the existing supply in the Sutton district and in the centre of the town by considerably increasing the pressure. The town's sources of supply were unaffected by the drought but, owing to reduction in the bulk supply purchased from Liverpool and increased claims on the town's supply from manufacturers owing to the failure of their private supplies, economy in the use of water became essential.

RIVERS AND STREAMS.—The position outlined under this heading in previous Reports is substantially unchanged.

SEWERS AND SEWAGE DISPOSAL.—The position in regard to sewerage and sewage disposal remains very unsatisfactory. Undoubtedly the question is a very difficult one in St. Helens owing to the damage caused to sewers through subsidence due to mining. With the increasing number of houses being built in various parts of the borough, however, solution of the problem should be hastened. As pointed out in previous Reports, very large volumes of sewage are passing into canals or streams untreated and are not only causing nuisance but are a serious danger to health. It is satisfactory to report that during 1933 a scheme for dealing with the sewage from the Sutton Manor district was approved, and it is hoped that the necessary work will commence at an early date. The scheme involves the construction of a separate sewage purification installation for that district and, when completed, will remedy what has been a long standing complaint. Other points where pollution is occurring should now be tackled.

Another problem to which attention should be given is the provision of sewers for districts which are being developed for housing. Houses are being erected in districts where there are no sewers and in too many instances septic tanks for each pair of houses are being installed. With further building there will develop districts with many small septic tanks. Continuous supervision of these will be difficult and eventually serious nuisance will arise.

CLOSET ACCOMMODATION.—During the year, 22 tub and pail closets were converted to the fresh water carriage system. It is estimated that there are still 474 houses with privy middens and 187 houses with tub and pail closets, and there are in addition 58 pail closets and one privy midden at various schools and works.

Many of the closets to be converted are either in areas which are now being dealt with by means of clearance schemes or are

attached to individual unfit houses which will shortly be demolished under the Housing Act, 1930. There will, therefore, be a considerable reduction in their number when the present slum clearance programme has been completed.

The conversion of other closets cannot be undertaken at the present time owing to the lack of adequate sewers, but it is hoped that this obstacle will, in some measure, be overcome in the near future.

Table 37 shows the number of conversions completed each year since 1904.

Table 37.

The number of conversions to the water carriage system completed each year since 1904.

Year Privies Tub and pail closets Total 1904 69 67 136 1905 80 64 144 1906 47 19 66 1907 237 125 362 1908 243 24 267 1909 106 38 144 1910 179 33 212 1911 270 129 399 1912 301 691 992 1913 460 646 1,106 1914 691 976 1,667 1915 300 380 680 1916 57 112 169 1917 45 103 148 1918 18 21 39 1920 284 369 653 1921 75 198 273 1922 45 350 395 1923 132	1			
1904 69 67 136 1905 80 64 144 1906 47 19 66 1907 237 125 362 1908 243 24 267 1909 106 38 144 1910 179 33 212 1911 270 129 399 1912 301 691 992 1913 460 646 1,106 1914 691 976 1,667 1915 300 380 680 1916 57 112 169 1917 45 103 148 1918 18 21 39 1920 284 369 653 1921 75 198 273 1922 45 350 395 1923 132 367 499 1924 160 685	Year	Privies		Total
1905 80 64 144 1906 47 19 66 1907 237 125 362 1908 243 24 267 1909 106 38 144 1910 179 33 212 1911 270 129 399 1912 301 691 992 1913 460 646 1,106 1914 691 976 1,667 1915 300 380 680 1916 57 112 169 1917 45 103 148 1918 18 21 39 1920 284 369 653 1921 75 198 273 1922 45 350 395 1923 132 367 499 1924 160 685 845 1925 82 278 360 1926 39 238 277 1927		1 111103	pan closets	
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1907 237 125 362 1908 243 24 267 1909 106 38 144 1910 179 33 212 1911 270 129 399 1912 301 691 992 1913 460 646 1,106 1914 691 976 1,667 1915 300 380 680 1916 57 112 169 1917 45 103 148 1918 18 21 39 1920 284 369 653 1921 75 198 273 1922 45 350 395 1923 132 367 499 1924 160 685 845 1925 82 278 360 1926 39 238 277 1927 69 264 333 1928 219 229 448	1905			
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1923 132 367 499 1924 160 685 845 1925 82 278 360 1926 39 238 277 1927 69 264 333 1928 219 229 448			198	273
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1925 82 278 360 1926 39 238 277 1927 69 264 333 1928 219 229 448				
1926 39 238 277 1927 69 264 333 1928 219 229 448				
1927 69 264 333 1928 219 229 448				
1928 219 229 448				
				_
1930 29 95 124				
1931 37 118 155				
1932 14 3 17				
1933	1933			

SCAVENGING.—The removal and disposal of house refuse is carried out by the Borough Engineer's Department. There are no refuse disposal works. Approximately three-quarters of the house refuse in the borough is tipped at the Parr Depot, the remainder being tipped on land situate in Merton Bank Road.

During 1933, 348 ashpits were abolished and 387 galvanised metal dustbins were provided as compared with 640 and 723 respectively for the previous year.

It is hoped to present to the Health Committee at an early date a scheme for the abolition of all the fixed ashpits in the borough.

As pointed out in previous Reports, these ashpits cannot be considered to be a satisfactory means of storing house refuse. Further, the adoption of a standard dust receptacle throughout the town will facilitate the collection of house refuse.

SANITARY INSPECTION OF THE AREA.—The total number of visits paid by sanitary inspectors during the year was 34,337. The nature of these inspections is shown in Table 38, and Table 39 contains a list of the notices served and the results of such notices.

TABLE 38.

Number and nature of inspections during 1933.

Complaints of Nuisances.

Number of	f Complaints	Investi	gated :	_					
1.	Housing De				•••••	•••••		****	746
2.	Choked and				*****	•••••	••••	*****	352
3.	Emission of				*****			*****	5
4.	Accumulation					*****	*****	•••••	33
5.	Miscellaneo					*****	******	******	110
,	1,110ccilarico	a.o	'''''	•••••	•••••	•••••	*****	*****	
Ine	pections	re Sa	nitat	ion	and	Food	Sur	nlv	
1113	peenons	ic ba	intat	.1011	and	1 000	bur	Piy.	
Dwelling F	Houses inspe	cted	*****		*****	*****		*****	3034
	Lodging Hou		•••••	•••••	*****			•••••	421
	-in-lodgings		•••••		•••••				238
	ards, back-r	_							830
	ure middens		_		*****	*****	*****	*****	51
Fried Fish			•••••	******	*****	*****	•••••	******	118
	Shops rs and Greei		******	•••••	*****	*****	•••••	*****	905
		ngrocers	•••••	******	*****	•••••	•••••	•••••	
Butcher's S		*****	•••••	•••••	*****	•••••	*****	*****	1,191
Ice Cream	Shops	•••••	•••••	•••••	•••••	•••••	•••••	•••••	190
			*****		•••••	*****	•••••	*****	388
Workshops			•••••	•••••	*****	•••••	•••••	•••••	636
Bakehouses		*****	•••••	*****	•••••	•••••	• • • • • •	*****	308
Workplaces		•••••	*****	•••••	*****		*****	*****	26
Offensive 7	Trades		•••••	•••••	•••••	*****	•••••	*****	191
Private Sla	ughterhouses	S			*****	*****	*****		237
Food Prepa	aring and Sto	oring Pla	aces		*****				686
	ublic Enterta		*****		*****			*****	153
	s and Sheds		*****	*****	•••••	*****	*****	*****	261
Schools									30
Testing Dr		*****	*****	•••••	*****	•••••	•••••	*****	20
By Smok									114
By Water		*****	*****	*****	*****	*****	•••••	•••••	413
	r ıred Water	*****	•••••	*****	*****	*****	*****	*****	15
	ing Down	*****	*****	*****	*****	•••••	•••••	*****	57
			•••••	*****	*****	*****	*****	*****	A
Ashes Rece		N/C11-1	•••••	•••••	******	•••••	•••••	•••••	2,402
	wsheds and			*****	*****	*****	*****	*****	966
	Milk procur		-						2/1
			•••••	*****	•••••	•••••	•••••	*****	261
	ogical Exami		*****	•••••	•••••	*****	*****	•••••	93
Bacterial		******				•••••	• • • • • • • • • • • • • • • • • • • •	*****	80
Sediment			*****		*****			*****	39
Samples of	Other Food	and Dr	ugs un	der tl	ne Food	ł & Dru	gs		
	ılteration) A				*****		*****		162
Samples of	Fertilisers as	nd Feed	ing Sti	uffs	*****	*****	******	*****	11
	Sewage for			*****	*****	*****		*****	4
Conversions						*****	*****	*****	229
Samples of	Water procu		*****	tee. 4	*****			*****	7
	Water Supp			•••••	*****	*****	•••••	*****	16
Smoke Obs		•		•••••					19
	ass Works (S				•••••	•••••	•••••	•••••	33
Enquiries re	Broker's Li	ICences	.c.m.z.a	•	*****	•••••	*****	*****	10
Visits to wo	rk in progre	es (P LI	Acto	House	ing Act	 te Cony			14,534
Rag Flock A				Tous				s, etc.)	17,774
				*****	*****	•••••	*****	•••••	
	commodation			******	*****	*****	*****	*****	A.C.
Miscellaneon	ice (Destruct		ι	*****	*****	*****	*****	*****	46
viiscenaneo	us visits	*****	*****	*****	*****	*****	•••••	•••••	4,932
									24.227
									34,337

Sanitary Defects-Number of notices served during 1933, and results.

	i			Number	
	Pre-		Number	outstanding	
Subject of Notice	liminary	Statutory	complied	at end of	Prose-
Subject of Horico	Notices	Notices	with	year	cutions
	Tyotices	TAOLICES	WILLI	year	Cutions
Ditches requiring alconoing	2		2		
Ditches requiring cleansing	_	30		3	
Defective drains	226	<i>5</i> 0	230)	
Insufficient surface water drainage	1/2		1.0		_
Choked drains	163	28	163	_	
Insufficient closet accommodation	3	<u>-</u> 14 •	2	2	_
Absence of proper sink	140	14	141	1	_
Conversion of trough closets to water					
closets	_	—			
Defective water closets	111	31	114		—
Defective pail closets	23	1	23		
Defective privy middens	8	i	4	4	
	151	22	151	4 2	
Defective gullies and dishstones	320	61	313	13	
Defective sink waste pipes	320	01	515	ال	
Defective W.C. cisterns and flushing	1//	20	171	10	
fittings	166	28	161	10	
Defective urinals	I				—
Defective soil pipes		1	_		—
Sink waste pipes connected with					
drains	_				
Yards and passages unpaved	18	_	13	10	
Defective yard paving	315	66	323	2	***************************************
	313	00	242		
Dampness arising from :—	000	177	891	45	
Defective roofs	908		949	39	
Defective eavesgutters	978	178			_
Defective downspouts	467	79	446	38	
Defective external pointing	1233	203	1209	53	
Insufficient lighting of rooms	6	_	6	_	_
Insufficient ventilation of rooms	129	11	131	<u> </u>	
Absence of ventilated foodstores	28		28	_	_
Insufficient water supply	12		22		—
Defective manure middensteads	5	_	4	3	
Dwelling houses to be whitewashed	6	. —	6	_	
Defective chimney flues	88	13	80	8	
	180	15	180		
Defective ashpits to be repaired		77	348	199	
,, to be abolished	306	//	240	177	
Galvanised Metal Dust Bins to be	201	77	207	77	
provided	306	77	387		
Absence of ashes accommodation	49	14	39	23 -	
Disused ashpits abolished	_	_	_	—	_
Defective window sash-frames and					
sashcords	1674	317	1678	17	-
Defective floors	833	165	847	4	
Defective stairs	203	30	215	4	
Defective internal plaster work	1053	205	1044	30	********
Defective fireplaces	580	106	591	_	_
	406	65	415		
		80	442		_
Defective doors, cupboards, &c	435	11	102	_	
Defective gas pipes and fittings	98		23		
Defective water pipes and fittings	22	7		9	
Defective yard division walls	90	11	88	9	_
Dangerous and defective chimney					
stacks	179	35	184	—	—
Fractured internal walls	94	7	81	15	
Defective and bulging external walls	211	35	209	14	—
Filthy condition of premises	51	1	42	11	
Accumulation of manure or offensive		·	_		
	39	5	41	11	
matter	9	_	9	5	
Keeping of animals, &c					

Table 39.—Continued.

Table 37: Continued:					
To abate overcrowding of dwelling					
houses	14	_	8	8	—
Miscellaneous	598	107	619	10	_
Contraventions of :—					
Milk and Dairies Order, 1926	9	—	10	—	1
Milk (Special Designations) Order, 1923	1	—	1	—	-
Public Health (Condensed Milk)					
Regulations, 1923 and 1927	—	_	_	-	_
Artificial Cream Act, 1929		—	_	_	_
Public Health (Meat) Regulations, 1924	7	—	7	—	_
Merchandise Marks Act, 1926	41	_	41	_	1
Agricultural Produce (Grading and					
Marking) Act, 1928	_	—	—	<u> </u>	
Sale of Food Order, 1921	30	—	30	_	6
Public Health (Preservatives, &c. in					
Food) Regulations	_	_	_	_	_
Factory and Workshop Acts	13	_	15	-	_
Contraventions of Bye-laws:					
Common Lodging Houses	-	-		_	—
Houses-let-in-lodgings	—	—	—	-	
Tents, vans, sheds		-	—	—	—
Slaughterhouses	_	_	_	—	_
Prevention of Nuisances	15	-	16	3	2
Drainage of existing buildings	_	—	—	_	_
	13054	2299	13126	673	10

Referred to other Departments.

Choked Street Gullies, &c., reported to Borough Engineer	.17
Waste Water reported to Water Department	
Dangerous structures reported to Borough Engineer	
Escapes of Coal Gas reported to Gas Department	
Choked Sewers reported to Borough Engineer	
Insufficient water supply reported to Borough Engineer	
Unauthorised Erections reported to Borough Engineer	
Choked Drains, etc. reported to Borough Engineer (Corporation property)	
Unpaved Passages reported to Borough Engineer	

During the year, 424 complaints of choked drains were made to the Department. Of this number, 293 drains were freed from obstruction by members of the staff of the sanitary department, thus obviating the necessity for serving notices upon the owners.

SMOKE ABATEMENT.—As mentioned in my Report for last year, a Regional Smoke Abatement Committee of which St. Helens is a constituent member has now been formed. This Committee, which has been called the West Lancashire and Cheshire Regional Smoke Abatement Committee, will not take over or control the administration regarding smoke abatement in the districts comprised in the area but will act in an advisory capacity.

One of the objects of the Committee is to bring about a more uniform administration in the area of the law relating to the emission of smoke. Though the Council's powers for dealing with this question cannot at the moment be considered to be adequate, it appears undesirable to seek further powers pending definite recommendations by the Advisory Committee.

It is hoped these recommendations will be forthcoming at an early date.

FACTORIES AND WORKSHOPS.—(a) Factories—4 defects remediable under the Public Health Acts were reported by H.M. Inspector of Factories, all of which were remedied during the year.

(b) Workshops—The number of workshops registered is 176 and Table 40 shows the classes of such workshops.

Table 40.
Registered workshops.

Workshops on the Reg	ıster	(s.	131)	at th	ne en	d of t	the y	year.		Number
Dressmakers and mantle	maki	ing								6
Milliners										12
Tailors										12
Hosiery Knitters	•••••				*****	*****				1
Joiners, builders, cabinet-	-mak	ers	and 1	olum	bers,	etc.		*****		24
Blacksmiths, wheelwright	ts, co	ach	build	ders	and r	nasoi	าร		••••	9
Weighing machine repair										2
Cloggers and boot repaire		•••••			•••••					63
2			•••••			•••••		*****		3
Tripe Dressers	•••••	•••••	•••••	•	•••••					2
Herbal Brewers		•••••	•••••	•••••		*****	•••••	*******		5
Seltzogene charge maker	•••••	•••••	*****		•••••	*****	•••••			l
Cab washing	•	•••••	•••••	*****		•••••	•••••	•••••	•••••	2
Saddler	•••••		*****	•••••		•••••	•••••	•	•••••	20
Sundries	•••••	•••••	*****		• • • • • •			•••••	•••••	20
Ice Cream Makers	•••••	•••••	•••••	•••••		*****	•••••	•••••	*****	6
Workshop Laundries	•••••	•••••	•••••	*****	•••••	*****		•••••	*****	6

(c) Outworkers—No lists of outworkers were received from employers during the year.

Table 41 gives particulars of the administrative action taken under the Factory and Workshop Act, 1901.

Table 41.

Factories, Workshops and Workplaces.

1.—Inspection of Factories, Workshops, and Workplaces, including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises		Inspections	Written Notices	Occupiers Prosecuted
. (1)		(2)	(3)	(4)
Factories (including Factory Laundries) Workshops (including Workshop Laundries) Workplaces (other than Outworkers' premises)	*****	388 636 26	31 28 —	
Totals	•••••	1050	59	_

2.—Defects found in Factories, Workshops and Workplaces.

	Nu	Number of			
Particulars.	Found.	Remedied.	Referred to H.M. Inspector.	offences in respect to which Prose- cutions were instituted.	
(1)	(2)	(3)	(4)	(5)	
Nuisances under the Public Health Acts—*					
Want of cleanliness	36	30	_	_	
Other nuisances	12	13		_	
Sanitary accommodation— insufficient					
unsuitable or defective	10	7	_	_	
not separate for sexes	1	1	_	_	
Offences under the Factory and Workshop Acts			_	_	
Totals	59	51			

^{*} Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

3.—Outwork in unwholesome premises, Section 108—Nil.

PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYELAWS OR REGULATIONS.—Offensive Trades.—There are 5 offensive trades in the borough, consisting of 4 tripe boilers and 1 gutscraper.

During the year, 191 visits were paid to premises of this nature.

Tents, Vans, Sheds, etc.—There were, at the end of the year, known to be 49 of these structures used as permanent habitations. Many of these structures are without adequate closet accommodation, house refuse accommodation, water supply or drainage.

It is hoped that with the increased powers obtained under the St. Helens Corporation Act, 1933, considerable improvement in present conditions will be obtained and that the number of these structures will be considerably reduced in the future.

Regular inspections of these premises have been made by the staff during the year and 261 visits were paid.

Houses-Let-in-Lodgings.—Only 12 premises are at present registered as houses-let-in-lodgings, but there are others which are known to be used for the purpose but which cannot be dealt with under the existing byelaws owing to their rateable values and rents being above the prescribed limit.

Revised byelaws have, however, now been submitted to the Ministry of Health for confirmation, and it is hoped these will become operative at an early date. They will bring a considerably larger number of premises within the scope of the byelaws and in addition will give greater powers for securing a higher standard of sanitary

accommodation and amenities. These additional powers will require, inter alia, the provision of:—

- (1) Adequate and reasonably accessible watercloset accommodation.
- (2) Adequate water supply and washing accommodation.
- (3) Proper means of lighting and ventilation of habitables rooms.
- (4) Accommodation for the storage, preparation, and cooking of food.
- (5) Adequate lighting of common staircase.
- (6) Means for the prevention of and safety from fire.
- (7) Handrails to staircases.
- (8) Separate approaches to rooms without passing through other rooms.
- (9) Sufficient sleeping accommodation to allow of separation of the sexes.

238 visits were paid to registered premises during 1933.

Common Lodging Houses.—At the end of 1933, twelve applications were received for the registration of premises as common lodging houses as compared with seven during 1932. This increase is due to the further powers for the control of these premises obtained by Section 121 of the St. Helens Corporation Act, 1933. Prior to the passing of this Act five of these premises escaped registration by reason of the period of letting being for longer than one day.

Advantage has also been taken of the increased powers this section gives for improving the general sanitation and amenities. of these premises. In each case registration was granted for six months only in order that alterations and improvements might be carried out within this period.

The principal alterations and improvements asked for are as follows:—

- (1) Sufficient means of escape in case of fire and sufficient first-aid fire appliances.
- (2) Adequate day-room accommodation.
- (3) Suitable ablution rooms provided with body baths, fixed lavatory basins and a sufficient supply of hot water.
- (4) Adequate means for the drying and airing of clothes.
- (5) Lockers for clothes or alternatively clothes rails and hooks in sleeping rooms.
- (6) Proper means for storage of food.
- (7) Sufficient cooking and eating utensils.
- (8) Suitable means of artificial lighting to bedrooms, stair-cases and passages.
- (9) Adequate bedding and bedroom utensils.
- (10) Flushing cisterns to outside urinals.
- (11) Fixed handrails to staircases.

All registered premises were regularly inspected during the year, 421 visits being paid for the purpose.

Revised byelaws for controlling common lodging-houses have also been submitted to the Ministry of Health for confirmation.

Pig-keeping.—The Byelaws obtained in December, 1930, for the control of pig-keeping appear to be very effective. There were 52 persons in the borough known to be engaged in the keeping of pigs at the end of the year and on the whole no nuisances are being caused.

OTHER SANITARY CONDITIONS.—Rats and Mice Destruction Act, 1919.—The duties of Rat Officer under the Rats and Mice Destruction Act, 1919, are now carried out by the Chief Sanitary Inspector.

46 complaints of infestation of premises by rats were received during the year. Upon investigation of these complaints it was found that in most instances the cause of infestation was either defective drains or sewers in the immediate neighbourhood of the premises concerned. When these defects were made good no further complaints were received.

Places of Public Entertainment.—153 visits were paid to Places of Public Entertainment during 1933. The condition of these premises throughout the year was found to be generally satisfactory.

Canal Boats.—No canal boat was inspected during the year, and it would appear that for the time being the canal has fallenge into disuse.

Mortuary.—A public mortuary with post-mortem room is maintained behind the Town Hall and is under the supervision of the Medical Officer of Health. During the year 43 bodies were received into the mortuary and 20 post-mortem examinations were conducted.

Arrangements for the Disposal of the Dead.—The cemetery provided and maintained by the Local Authority now extends to approximately 56 acres of which approximately 32 acres are still available for burial purposes.

In addition, private cemeteries are still in use in connection with the following churches:—St. Peter's, Parr; St. Nicholas's, Sutton; St. Thomas's, Windsor Road; St. Anne's, Sutton; and Windleshaw Abbey.

The Rag Flock Acts, 1911 & 1918.—No sample of Rag Flock was taken during the year.

Sanitary Condition of Schools.—During 1933 there were 40 public elementary schools with 83 departments in the Borough.

Conditions in council schools are on the whole good, all these being of fairly recent construction. In some of the older schools, however, pail closets are still in existence, whilst in others trough closets with automatic flushing cisterns are still being used.

I would urge that wherever possible the remainder of the unsatisfactory types of closets should be replaced.

XV.—HOUSING.

STATISTICS.—Of the 343 houses erected during 1933, 92 were erected by the Local Authority and 251 by private or commercial enterprise.

Table 42 shows the number of dwelling houses erected in each ward since 1904.

Table 42.

The wards of the borough in which dwelling houses have been erected during the years mentioned.

Year	North Eccles- ton	South Eccles- ton	Central	North Windle	South Windle	Hard- shaw	East Sutton	West Sutton	Parr	Total
1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933	105 19 11 22 2 14 35 10 10 6 — — — — — 1 2 8 19 33 12 4 24 79 449 115	53 93 51 38 52 36 31 20 28 31 42 9 12 — 1 1 5 24 76 172 189 116 219 148 61 77 56	7 1	37 44 31 26 4 10 10 - 4 - 9 26 1 - 41 164 2 25 90 106 125 237 35 39 52 10 20	18 16 13 2 3 16 1 1 16 3 5 1	47 90 31 22 27 10 24 30 26 19 14 2 2 ————————————————————————————————	59 42 73 77 22 6 18 75 28 14 20 8 4 ——————————————————————————————————	1 10 24 3 -3 -26 58 99 63 25 16 9 3 -6 -33 45 48 63 14 13 5 3 29 37 1	70 54 39 29 20 10 25 12 1 6 29 27 16 — — 5 15 51 56 335 185 54 17 3 46	397 369 273 217 129 75 110 177 180 182 203 104 52 9 3 4 4 48 165 45 103 247 450 648 820 495 363 299 673 343

A statement as to the number of houses erected with and without State assistance, together with a summary of the work of the department in regard to housing, is given in Table 43.

39

Table 43.

Housing.

N	umber of new houses erected during the year :-	
	(a) Total (including numbers given separately under (b)) 343)
	(b) With State assistance under the Housing Acts: (i) By the Local Authority 92)
	(ii) By private or commercial enterprise	_
	(c) Without State Assistance under the Housing Acts:	
	(i) By the Local Authority	_
	(ii) By private or commercial enterprise 251	
1	—Inspection of Dwelling-houses during the Year:—	
	(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or	
	Housing Acts)	•
	(b) Number of inspections made for the purpose 17568)
	(2) (a) Number of dwelling-houses (included under	
	sub-head (1) above) which were inspected and recorded under the Housing Consolidated	
	Regulations, 1925	•
	(b) Number of inspections made for the purpose 3204	-

so dangerous or injurious to health as to be

unfit for human habitation.....

(3) Number of dwelling-houses found to be in a state

 2.—Remedy of Defects during the year without service of formal notices:— Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	2353
A.—Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930:—	
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	nil.
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a) By owners	nil.
(b) By Local Authority in default of owners	nil
B.—Proceedings under Public Health Acts:—	
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	504
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a) By owners	470
(b) By Local Authority in default of owners	nil,

C.—Proceedings under Sections 19 and 21 of the Housing Act, 1930 :— (1) Number of dwelling-houses in respect of which Demolition Orders were made..... 36 (2) Number of dwelling-houses demolished in pursuance of Demolition Orders..... nil. D.—Proceedings under Section 20 of the Housing Act, 1930 :--(1) Number of separate tenements or underground rooms in respect of which Closing Orders were nil. (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit nil.

SLUM CLEARANCE.—Following the passing of the Housing Act, 1930, a survey of all insanitary property in the borough was undertaken and, as a result of such survey, it was suggested that during the five years 1931—1935 unsatisfactory housing conditions in St. Helens might be dealt with by declaring certain areas to be improvement areas and by dealing with the remainder of the insanitary property as individual unfit houses. These proposals were approved by the Council and submitted to the Ministry in December, 1930.

In April, 1933, the Ministry of Health issued a further circular dealing with housing conditions and asked Local Authorities to revise their programmes so as to allow for the speeding-up of "the clearance"

of slums and the improvement of bad housing conditions". The circular stated that the revised programme should so far as practicable be drawn on the basis of clearing all areas that required clearance not later than 1938.

In consequence of this a further survey of insanitary property in the borough was undertaken and as a result of previous experience in the administration of the Housing Act, it was considered advisable to revise the original proposals submitted to the Minister.

In the report presented to the Health Committee on October 2nd, 1933, it is suggested that insanitary property in the borough should be dealt with partly by means of small clearance schemes and partly as individual unfit houses under Section 19 of the Act. The effect of these proposals is that 202 houses would be dealt with by means of 32 small clearance schemes and 53 individual unfit houses under Section 19. In addition it is anticipated that the 106 back-to-back houses in the borough would be made into through houses.

The special report to the Health Committee regarding these proposals is printed as an Appendix.

Clearance Areas.—On January 4th, 1933, the Council passed resolutions declaring the Short Street Area and the Bath Street Area to be Clearance Areas. Clearance Orders were made by the Council in respect of these Areas on April 3rd, 1933, and June 7th, 1933, respectively.

A Clearance Order was also made by the Council in respect of the Tontine Street and Market Street Area on June 7th, 1933. An official representation regarding this Area was submitted to the Council in October of the previous year. Consequent on the making of these Clearance Orders a local inquiry was held by the Minister of Health on August 28th, 1933, and on November 3rd, 1933, the Orders were confirmed without modification.

Full particulars regarding these areas were given in my Report for 1932.

Individual Unfit Houses.—The following individual unfit houses were dealt with during the year under Section 19 of the Act:

3 Mill Place	Janua	ary 11tl	n, 1933.
5 Mill Place		do.	
7 Mill Place		do.	
9 Mill Place		do.	
9 Copperas Street		do.	
11 Copperas Street		do.	
No. 4, Court No. 2, Bold Street		do.	
Disused house adjoining No. 4, Court			
No. 2, Bold Street		do.	
No. 3, Court No. 3, Liverpool Street		do.	
No. 5, Court No. 3, Liverpool Street		do.	
No. 27 Back Bold Street		do.	
3 Mill Street	July	28th,	1933.
5 Mill Street	•	do.	
7 Mill Street		do.	
9 Mill Street	••	do.	
11 Mill Street		do.	
13 Mill Street		do.	
187 Boundary Road		do.	
189 Boundary Road		do.	
191 Boundary Road		do.	
193 Boundary Road		do.	
197 Boundary Road		do.	

228 College Street July	28th, 1933.
230 College Street	do.
232 College Street	do.
234 College Street	do.
236 College Street	do.
1 Kurtz Crossing, Warrington Old Road	do.
2 Kurtz Crossing, Warrington Old Road	do.
3 Kurtz Crossing, Warrington Old Road	do.
1 Back Traverse Street	do.
2 Back Traverse Street	do.
206 Fleet Lane	do.
208 Fleet Lane	do.
Dwelling-house known as Farm Cottage,	
Moss House Farm, Fleet Lane,	
St. Helens	do.
122 Back Liverpool Road	do.
81 Back Chancery Lane	do.
Dwelling-house situate behind the Bowling	
Green Hotel, Watery Lane, St. Helens,	
and known as 6 Moss Nook, St. Helens	do.
Dwelling-house situate behind 149—183	
Chancery Lane, St. Helens, and known	
as No. 2, Rushy Park Cottage, Chancery	
Lane, St. Helens	do.

Undertakings were accepted by the Council to repair the houses Nod. 9 and 11 Copperas Street and to discontinue the use of the houses Nod. 81 Back Chancery Lane and No. 2 Rushy Park Cottage, Chancery Lane, for human habitation. Demolition Orders were made in respect of the remaining houses.

RECONDITIONING.—Despite frequent changes of staff, satisfactory progress is being maintained in the repair and reconditioning of unfit houses. Much of the worst property in the borough

capable of repair has now been dealt with. This has been brought about mainly by negotiations by the sanitary inspectors with the owners of the property concerned. In no instance has it been necessary to institute legal proceedings or carry out repairs in default.

VERMINOUS HOUSES.—In July an investigation of the extent of infestation by bugs and cockroaches on one of the Council's housing estates was made, and it was found that 90 out of the 246 houses on the estate showed evidence of infestation by both bugs and cockroaches, 5 were infested by bugs only, and 114 infested by cockroaches only. These houses were only erected in 1928.

Following this investigation a special report was made to the Housing Committee dealing more particularly with precautionary measures to prevent future infestation of houses erected for re-housing persons displaced from slums under the Housing Act, 1930. This question is one which is receiving the attention of many Local Authorities at the present time. The methods suggested were the fumigation of all furniture and household effects and the steam disinfestation of all bedding. It was further suggested that in addition bathing of the occupants of each house at a cleansing station and disinfesting of personal clothing by steam would prevent the possibility of the tenants acting as carriers.

From enquiries made, the most effective method of fumigation appears to be by hydrocyanic acid gas and this method is now being adopted by a considerable number of Local Authorities throughout the country. The process consists briefly of loading the furniture and household goods from each house into a special container—an ordinary furniture van rendered gas-tight is generally used—and after the required amount of gas has been introduced sealing the van for 6 hours. At the end of this period the van is opened and the gas allowed to escape, special precautions being taken to drive off any gas which might be retained in carpets, upholstery or other fabrics.

In St. Helens, however, no systematised scheme of disinfestation of either the houses already infested or the furniture and household effects of persons removed from slums has been adopted. only precautions taken are that in some cases of re-housing the bedding has been disinfested by steam and the tenants have been advised regarding cleanliness before and after removal. It is extremely unlikely that these measures will be effective and I would again suggest that if infestation of the new houses is to be prevented a systematic method of complete fumigation of furniture and household goods, combined with steam disinfestation of bedding, should be adopted in Practically all the houses being dealt with in slum clearance schemes are infested with vermin, and when the present tenants are moved into a new house they are bound to carry vermin with them in the furniture, bedding, clothing, &c. It is frequently not the fault of the present tenant that the bugs are there. They would be only too glad to be free from them. Unless, however, everything taken to the new house is properly disinfested infestation of that house will occur.

XVI.—HEALTH EDUCATION.

As mentioned in my last Report a Health Week, with which was incorporated a Health and Hygiene Exhibition, was held in St. Helens in 1932, and, it was felt, therefore, in view of the call for restriction in expenditure, that no such special effort should be made during 1933 but that the usual daily measures for health education should be continued.

During the year The British Social Hygiene Council arranged for the exhibition of a special film on social health subjects at one of the local cinemas for a period of one week. This film aroused much interest and its display was successful health propaganda. Booklets were also obtained by the department, free of cost, from this voluntary association and distributed among various bodies in the borough.

Through the courtesy of the National Milk Publicity Council, a series of lectures on dietetics, including principally the subject of milk and its uses, was given by one of the Council's staff to mothers and expectant mothers attending the maternity and child welfare and ante-natal centres. These lectures were of great educational value and were very much appreciated.

Another popular form of health education was the distribution of the leaflets, booklets, and posters issued free of charge by the Health and Cleanliness Council. This literature is very attractively presented and there is a keen demand for supplies from the schools and health centres in which it was distributed.

Towards the end of the year, the Corporation were offered and decided to take over without charge the four poster frames which had previously been used by the Empire Marketing Board. Arrangements were then made with the Central Council for Health Education for the display on these frames of posters dealing with health subjects, the production of which would be organised by that body. Many of these posters are designed by the national associations actively associated in health propaganda, and they provide a very popular means of educating the public in matters of public health interest.

APPENDIX.

HOUSING ACT, 1930.

Report by the Medical Officer of Health on "the clearance of slums and the improvement of bad housing conditions."

(Ministry of Health Circular, 1331).

Submitted to the Health Committee on the 2nd October, 1933.

The Committee will remember that following the passing of the Housing Act, 1930, I made a special report dealing with housing conditions in the area and the provision of new housing accommodation. That report dealt with two aspects of the housing question, namely, (a) the provision under the Housing Act, 1924, of houses to meet the ordinary housing requirements of the borough and (b) dealing with insanitary property under the Housing Act, 1930, and the re-housing of persons displaced as a result of any action taken under that Act.

In that report it was estimated that during the period 1931—1935, 800 houses would be provided by the local authority under the Act of 1924, 500 by private enterprise, and 399 by the local authority under the Housing Act, 1930. It was further estimated that 1,500 houses would be repaired under Part II of the Housing Act, 1930.

Since then the actual work carried out up to the 30th June, 1933, has been 514 houses built by the local authority under the Housing Act, 1924, 618 houses by private enterprise and 1,140

houses repaired under Part II of the Housing Act, 1930. No houses have yet been built for re-housing under the Housing Act, 1930, but a scheme for the provision of 32 houses has now been approved and the houses are in course of erection. In addition proposals for the erection of a further 16 houses are now being considered by the Ministry.

With the passing of the Housing (Financial Provisions) Act, 1933, withdrawing the subsidy, building by the local authority to meet the ordinary housing needs of the area as distinct from re-housing has, for the moment, come to a stand-still.

I do not propose, therefore, to deal with that side of the question but to deal entirely with the question of slum clearance and the improvement of bad housing conditions.

Procedure under the Housing Act, 1930.—As explained on previous occasions this Act considerably modifies former methods for dealing with insanitary property. The three methods by which such property can now be dealt with under this Act are:—

(a) Clearance Schemes.—By this method the Council, on being satisfied that all the buildings in an area are unfit for human habitation on account of disrepair or sanitary defects or are dangerous or injurious to the health of the inhabitants of the area by reason of their bad arrangement or the narrowness or the bad arrangement of the streets and that the only method of dealing with the area is by the demolition of all the buildings in it, may declare such area to be a Clearance Area. Having done so they proceed either to make a Clearance Order or a Compulsory Purchase Order (either of which is subject to confirmation by the Ministry) or they may arrange to purchase by agreement. In either case, however, demolition of all the buildings in the area must be carried out and the re-development

of the area is subject to certain restrictions. An essential part of any action taken by a local authority in respect of Clearance Areas must be the provision of new houses for the accommodation of persons displaced.

- (b) Improvement Schemes.—Where in an area the houses are not so far gone and the general conditions are not so bad as to justify wholesale clearance the Council may declare the area to be an Improvement Area. For such an area, however, it is necessary to show that not only are the houses themselves dangerous or injurious to health by reason of disrepair or sanitary defects but also that their overcrowding or their bad arrangement or the bad arrangement or narrowness of the streets is also dangerous or injurious to health. The methods by which improvement is carried out are:—
 - (i) the demolition or repair of houses unfit for human habitation.
 - (ii) the purchase by the authority of any buildings required to be demolished for opening out the area, and
 - (iii) abatement of overcrowding.

As in a Clearance Area an essential part of the programme is the re-housing of persons displaced. Further, in Improvement Areas byelaws must be made for the subsequent maintenance of a proper standard of housing conditions in the Area.

- (c) Individual Unfit Houses.—These are divided into two categories:—
 - (i) those which can be repaired at a reasonable cost, and
 - (ii) those which cannot be repaired at a reasonable cost.

In the former case notices are served in the ordinary way on the owner to carry out the necessary repairs. In the latter case the chouse is to be demolished unless the local authority accept an undertaking from the owner either that the house shall cease to be used for human habitation or that he will, within a specified time, carry out such works as will in the authority's opinion render it fit. Local Authorities are not compelled to re-house persons displaced from individual unfit houses though it is desirable that they should do so and, if they do, they are entitled to the Ministry's grant per sperson displaced.

Previous Proposals.—In my previous report I suggested that during the five years 1931—1935 insanitary housing conditions in St. Helens might be dealt with by declaring certain areas Improvement Areas and dealing with the remainder of the insanitary property as Individual Unfit Houses. The Improvement Areas suggested were:—

- (1) Greenbank Area.
- (2) Liverpool Road, Mill Place, and Canal Street Area.
- (3) Russell Street Area.
- (4) Waterloo Street and Cross Street Area.
- (5) Milk Street, New Cross Street, and Brook Street Area.
- (6) College Street and Crab Street Area.
- (7) Carter Street, Clarence Street, and Arnold Street Area.
- (8) Sherdley Road and Marshalls Cross Road Area.

These schemes meant the demolition of 61 houses, the conversion of 16 back-to-back houses into through houses and the re-housing of 327 persons living under overcrowded conditions. They also included the repair of all other houses—approximately 150—in the areas.

In that report I also suggested that outside these areas there were 135 individual unfit houses which would be demolished and 120 back-to-back houses to be converted into 60 through houses.

Since making these proposals, however, opinions have considerably changed, mainly on account of the further experience of the working of the Act, and the Council have found it more expedient to proceed by means of small Clearance Areas and dealing with Individual Unfit Houses. Up to the present 3 Clearance Orders have been made, namely, the Bath Street Clearance Order; the Short Street Clearance Order; and the Tontine Street and Market Street Clearance Order. These Orders involve the demolition of 39 houses, 14 of which are occupied and the displacement of 62 persons. 43 Individual Unfit Houses have also been dealt with and in respect of these 36 Demolition Orders have been made and in the remaining 7 instances the Council have accepted or are likely to accept undertakings either that the houses will be satisfactorily repaired or will cease to be used for human habitation. These Demolition Orders and undertakings accepted or likely to be accepted mean the displacement of 184 persons. To date, therefore, 246 persons will be displaced either from the Clearance Areas dealt with or from Individual Unfit Houses and the Council's proposals for rehousing are the erection of 32 houses on the Jackson Street Site capable of accommodating 166 persons, and 16 houses on the Rivington Road Site capable of accommodating 76 persons.

Proposals for Future Action.—In April of the present year the Ministry of Health issued a further circular dealing with housing conditions and asked local authorities to prepare and adopt a programme for the speeding-up of "the clearance of slums and the improvement of bad housing conditions". This "programme should so far as practicable be drawn on the basis of clearing all areas that require clearing not later than 1938", and from the forms which have to be completed it is obvious that it is not only to deal with areas

but also with individual unfit houses. In view of the experience of the last two years it has been thought advisable to make a complete new survey of the town. This has now been completed and I would suggest that the programme of 1930 be cancelled and that conditions in future be dealt with by means of small clearance schemes and by dealing with individual unfit houses under Section 19 of the Act. It should be understood, however, that the present programme is a programme of proposals only, and though it is hoped it will remain as the Council's intentions for dealing with insanitary housing conditions during the next five years, each proposal will have to be considered in detail before being put into effect and slight modifications will, therefore, probably be made from time to time.

Clearance Schemes.—There are 32 areas in the town in which I think conditions can best be dealt with by means of Clearance Schemes, i.e., by the demolition of all the buildings in the Area. These areas vary very much in size ranging from 2 to 34 houses.

The areas recommended as Clearance Areas together with the number of houses, number of occupants, and proposals for rechousing and the probable years during which they will be dealt with are given in Schedule "A." The time-table has so far as possible been arranged on the basis of dealing with an equal number of houses each year.

These schemes mean the demolition of 202 houses and should the population of each area at the time the area is dealt with be the same as at present, the displacement of 948 persons for whom 193 houses should be provided.

Individual Unfit Houses.—Apart from individual unfit houses which it is considered could be repaired at a reasonable cost and which will be dealt with under Section 17 of the Act, there are 53 individual unfit houses which cannot be repaired at a reasonable cost and which

should be demolished under Section 19 of the Act though it must be remembered that the Council must consider any proposals for repair or the future use of the house put forward by the owner. Should demolition orders be made in all cases this would involve the displacement of 249 persons for whom it is estimated that 50 houses will be required. For these houses the Council would be entitled to the Ministry's grant for re-housing.

There are also 6 premises in which part of the building is let as a separate tenement and where such tenement is deemed to be unfit for human habitation. In these cases Closing Orders under Section 20 of the Act should be made prohibiting the use of the tenement for human habitation, and such Closing Orders would remain effective until it has been rendered fit. Should this procedure be adopted this would involve the displacement of 24 persons for the re-housing of whom the Ministry's grant would be available.

In addition to the above there are also 106 back-to-back houses to be dealt with, and it is considered that the best means of dealing with these will be under Section 19 of the Act. Should, as will probably occur, the owner put forward proposals to convert these back-to-back houses into through houses, it is considered that in the majority of cases such proposals would be acceptable. This would mean that from each pair of back-to-back houses one family would be displaced, and though as in the case of other houses dealt with as individual unfit houses there is no obligation on the Council to re-house these persons, I would recommend that such provision be made. I would point out, however, that unless the suggestion of Lord Moyne's Committee is put into effect no grant will be paid by the Ministry for such provision.

The total number of individual unfit houses or parts of houses to be dealt with together with the suggested time-table for dealing with them are shown in Schedule "B."

Summary.—The following statement gives a general summary of the effect of the proposals.

	No. of houses to be demo-	Persons to be	N	lew houses provided			Providing accommo-
	lished or closed.	displaced.	bed.	3 bed.	bed.	Total.	dation for
Clearance Areas	202	948	56	110	27	193	963
Individual Unfit Houses (other than back-to-back) to be dealt with under Sec. 19 of the Act Parts of premises to be closed under	53	249	12	32	6	50	250
Sec. 20 of the Act	6	24	1	3	1	5	26
Total	261	1221	69	145	34	248	1239
Back-to-back houses to be converted into	No. of houses						
through houses	106	201	10	28	3	* 41	201
	Total	1422	79	173	37	289	1440

^{*} These houses are not eligible for Ministry's grant.

The years during which it is proposed re-housing should take place are as follows:—

	1.00.00	ŀ	Houses to	be pr	ovided		
	1933	1934	1935	1936	1937	1938	Total
Houses to be provided for displacements in :— Clearance Areas	_	38	46	50	24	35	193
Individual Houses	_	9	5		22	14	50
Parts of houses	_			5		_	5
Back-to-back houses	_	8	8	8	8	9	41
Totals		55	59	63	54	58	289

Schedule "A".

Proposed Clearance Areas.

	,	,		Hor	Houses to be provided	provided		Year of
Clearance Area	No. of houses	No. of families	No. of occupants	2-bed.	3-bed.	4-bed.	Total	displacement and re-housing
College Street: 57, 59, 61, 63, 65, 67, 69, 71, 71a, 73, 75, 77, 79, 81, College Street. 61 back College Street. No. 2,								,
Court No. 1, Crab Street. 5, 7, 9, 11, 13, 15, Crab Street. 15-16 back Crab Street. No. 1, Court No. 2 Crab								
Street. I and 2, Court No. 3, Crab Street. Workshop								
Crab Street (wash-house)	34	43	091	6	22	2	33	1934
College Street (Court No. 1): 2, 3, 4, Court No. 1, College Street	3	3	4	2	1	1	2	1934
Crab Street: 6, 8, 10, Crab Street	3	3	4	_	2	-	3	1934
Eltonhead Road: 658, 670, 672, 674, Eltonhead Road					,		(
1, 3, 5, 7, Swaine Street	∞	6	46	\mathcal{C}	4	7	6	1935
Sherdley Koad: 1, 3, 5, Sherdley Road	3	4	17	1	2		3	(935
Marshalls Cross Road: 1, 3, 5, 7, 9, 11, back Marshalls Cross Road	9	7	35	2	4		7	1935
Normans Koad: 16, 18, 20, Normans Road	3	3	4	_	2		3	1935
45, 47, 49, 51, Russell Street. No. 2, Court No. 3, Russell Street	5	5	91	2	2	!	4	1935
Russell Street (Court No. 1): 7, 8, 9, 10, 11, Court No. 1, Russell Street	5	9	17	2	2	1	4	1935

No. of Clearance Area. No. of houses familie	No. of families. 2 4 4 4 5	No. of occupants 6 10 13 20 47	2 2 2	Houses to be provided 1. 3-bed. 4-bed. 2. — 2 — 7 3	4-bed.	Total	Year of displacement and re-housing
houses f hou	families. 2 4 4 4 5	6 10 10 13 13 47	2-bed. 2	3-bed.	4-bed.	Total	and re-housing
2 3 5, Carter t	2 4 4 5 0	64 64 20 20	2 2	2 7			
11 4	4 4 5 0	10 64 13 20 47	2 2	2 7		2	1935
11 4	4 4 5 0	64 13 20 47	7 7 1	7	1	2	1935
4	4 5 01	13 20 47	7		60	12	1935
5	5 01	20	1	_	1	3	1936
	0	47		4	I	4	1936
8, 10, 12, 14, 16, 18, 20, 22, 24, 26, Milk Street and stables in rear of same)		2	5	2	6	1936
132, 134, 138, 140, 142, 144, Duke Street. No. 1, Court No. 5, Duke Street. No. 2, Court No. 7	7	3		4		9	1936
)): 10, Court No. 3, Duke Street 9	. 6	24		. 4	-	2 0	1936
Dentons Green Lane: 32, 34, 36, Dentons Green Lane 33 3	23	∞	-	_	1	2	1936
7, 9, 11, 13, Cross Street. 1 and 2, Court No. 1, Waterloo Street. 1 and 2, Court 15, 9, 11, 13, Cross Street. 1 and 2, Court 16	24	104	9	13	2	21	1936
Littlers Court: 1, 3, 5, 7, 9, 11, 13, Littlers Court. 309 Derbyshire Hill Road 88	œ	45	-	4	23	8	1937
1, 3, 5, Platts Street 3 3 3	23	61	1	_	2	3	1937
Fleet Lane (190.1): 521, 523, 525, Fleet Lane	3	13	-	2	1	3	1937

	2		2	Hon	Houses to be provided	provided.		Year of
Clearance Area.	No. of houses.	No. of families	No. of occupants	2-bed.	3-bed.	4-bed.	Total.	displacement and re-housing
Fleet Lane (No. 2): 462, Fleet Lane. 1 and 2, back Fleet Lane	3	3	12	2		•	ω	1937
Fleet Lane (No. 3): 422, 424, 426, 428, Fleet Lane	4	4	17		2	-	2	1937
Berrys Lane: 2, 4, 6, off Berry's Lane	3	3	6	-	phases	1	2	1937
lickle Street: 15, 17, 19, Tickle Street	3	3	œ	2	1		2	1937
Blackbrook Road: 63, 65, 67, 69, 71, Blackbrook Road: 2 back Blackbrook Road	9	9	34	1	4	2	9	1938
Higher Farr Street: 78 and 80, and 82 Higher Parr Street and other buildings (86 and 88 Higher Parr Street) and								
Parr Street	2	2	13	-	2	.	3	1938
160, 162, 164, 166, 168, 170, 172, 174, 176, 178, Merton Bank Road	01	01	51	2	3	4	6	1938
Farr Street: 106, 108, 110, Parr Street	3	8	∞	2		İ	2	1938
Focket Nook Street: 61, 63, 63a, Pocket Nook, Street 2, 4, Wood Street	5	5	21	2	3	1	5	1938
Canal Bank East: 15, 17, 19, Canal Bank East	10		48	3	9	_	10	1938
Totals Totals	202	229	948	56	110	27	193	

Schedule "B". Individual Unfit Houses or parts of houses to be dealt with.

	1933	1934	1935	1936	1937	1938	Total
Individual Houses. Number to be demolished under Sec. 19		10	5		23	15	53
Number to be closed under Sec. 20	1	1	1	9		1	9
Number of persons displaced	ı	39	24	24	109	77	273
Number of new houses provided		6	5	5	22	7	55
	1933	1934	1935	1936	1937	1938	Total
(Note—Grant will not be obtained for re-housing persons displaced). Number of houses to be dealt with		21	21	21	21	22	901
Number of persons to be displaced	1	40	40	9	9	4	201
Number of new houses to be provided		∞	∞	∞	ω	6	14

Re-housing.

	roposals.
	<u>d</u>
)	Rehousing
	jo
	Particulars

	Probable date of completion.			1934			1935			At approx. 60 per annum during 1936, 1937, and 1938.				
Estimated all-in cost per house			Total	વર	350	375	400	330/10/0	355/10/0	380/10/0	345	370	395	
	Other	costs	(if any)	48		l				!		!		
		Build-	ing.	43	265	290	315	265	290	315	265	290	315	
	Ponde	and	Sewers.	48	09	09	09	55	55	55	55	55	55	
			Land.	48	25	25	25	0/01/01	0/01/01	10/10/0	25	25	25	
No of position	No. of persons for whom the		vide accommoda-	Sec. 37.	48	150	4	64	170	99	204	545	681	1440
Otto	louses.	Superficial	area of	cacii type.	640 ft.	700 ft.	756 ft.	640 ft.	700 ft.	756 ft.	640 ft.	700 ft.	756 ft.	
I posodo	rroposed rouses.	No. of		rype	12	30	2	91	34	∞	51	109	27	289
	1		T	1 ypc	2 bed.	3 bed.	4 bed.	2 bed.	3 bed.	bed.	2 bed	3 bed.	4 bed.	
	Name, situation and area of site, whether already acquired and, if so, for what purpose.				Rivington Road—Site 30 (44 houses). To be acquired on		Area—3.43 acres	Gaskell Street—Site 31 (58 houses). Already acquired for Housing Parks and Water	purposes.	Area—4.03 acres.	On future sites to be acquired. (187 houses).	Probable area—15.6 acres.		

Estimated cost of re-housing persons displaced by proposed Clearance Schemes or in dealing with Individual Unfit Houses—1934 to 1938.

1.	Annual Loan Charge for 60 years on £105,259 for 289 houses	£ 5,798·573053
2.	Insurance, Repairs, Supervision and Management at £5 per house per annum	1,445
	Total annual charge	7,243·573053
3.	Less Government contribution at £2/5/0 per annum per person displaced for 40 years on a 60 years basis for 1221 persons	2,447·822460
4.	Deficiency to be met by Corporation subsidy and rents charged to tenants	4,795·750593
5.	Corporation contributions at £3/15/0 per house per annum for 40 years on a 60 years basis	965:630246
6.	Remainder to be met by rents charged or further cost to the Corporation	3,830·120347

This amount could be liquidated by charging the following Net Weekly Rents:—

For the 79—2 bedroom houses—4/4d. each per week.

173—3

do.

5/3d.

do.

37—4

do.

6/-

do.

The Rateable Values would be respectively £10, £11, and £12, so that with a General Rate of 16/- in the £ and a Water Rent of 14.2% on the R.V. the following Inclusive Weekly Rents could be fixed:—

For the 79—2 bedroomed houses—7/10d. each per week.

173—3

do.

9/1d.

do.

37—4

do.

10/2d.

do.

and assuming that the tenants would be able to pay such rents then the Annual Cost to the Corporation for 60 years would be Item No. 5-£965/12/8.

Note.—In the above calculations it has been accepted that no Grant will be receivable in respect of those persons displaced from back-to-back houses.